DOCUMENT RESUME

ED 273 328 JC 860 480

AUTHOR	Morrison, James L.; Neal, Edward M.
TITLE	The Two-Year College Course at UNC-Chapel Hill: An Experiment in Preparing Future Leaders.
INSTITUTION	North Carolina Univ., Chapel Hill.
PUB DATE	[85]
NOTE	74p.
PUB TYPE	Reports - Descriptive (141) -- Guides - Classroom Use - Guides (For Teachers) (052)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	*Class Activities; *College Planning; *Course Content; Course Descriptions; *Futures (of Society); Higher Education; *Leadership Training; Needs Assessment; Postsecondary Education as a Field of Study; Simulation; *Two Year Colleges

ABSTRACT

The graduate-level course on the two-year college described in this paper focuses on having students create a hypothetical college, Orange County Community College (OCCC), and apply futures research techniques in the strategic planning process. Following introductory comments, course objectives are enumerated; i.e., develop a perspective of the two-year college as an organization and social institution; understand the nature of the two-year college; identify major issues facing the two-year college; and develop skill in using selected futures research methods. Methods for achieving these objectives are discussed next, including the formation of an in-class environmental scanning committee and OCCC planning committee; the use of probability-impact charts; the use of impact networks; the use of environmental analyses; and the development of the plan for OCCC. Next, student evaluations of their experience are summarized. A 13-page bibliography of works on the two-year college is presented, organized by such topics as objectives and functions, history, instruction, students, faculty, administration, and the future of the two-year college. Appendices include a study guide of questions designed to give direction to the planning committee's activities; a sample OCCC plan; a scanning taxonomy; and the guide, "How To Be an Environmental Scanning Monitor." (LAL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED273328

THE TWO-YEAR COLLEGE COURSE AT UNC-CHAPEL HILL: AN EXPERIMENT IN PREPARING FUTURE LEADERS

James L. Morrison

Professor of Education

University of North Carolina at Chapel Hill

Chapel Hill, North Carolina 27514

and

Edward M. Neal

Director, Faculty Development Office

University of North Carolina at Chapel Hill

Chapel Hill, North Carolina 27514

JC 860 480

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

X Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J. L. Morrison

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

The Two-Year College Course at UNC-Chapel Hill: An Experiment in Preparing Future Leaders[1]

Today, America's two-year colleges face many dramatic challenges, some of which have already begun to alter the environment in which these colleges operate. Demographic shifts have changed the market for their services; declining governmental suppport has begun to restrict institutional flexibility and educational opportunity for many students; and rapid technological advances have made some curricula obsolete. Consequently, one of the critical issues two-year college administrators must address is the way in which they analyze and react to events in their internal and external institutional environments. If they lack knowledge of these environments, they cannot develop appropriate strategies to achieve institutional goals. To formulate and select strategic policies, they must be able to accurately assess opportunities and threats the environment poses for their organizations. Well developed scenarios of alternative futures illustrate unique configurations of trends and possible future events with which the institution may have to contend, thereby providing the basis for selecting strategic options.

Preparing graduate students for leadership roles in two-year colleges requires paying careful attention to the potential applications of knowledge and skills. Consequently, a course on the two-year college should do more than cover the history, philosophy, structure, and function of these institutions, but should also focus on developing skills in anticipating and evaluating changes which may affect the direction and management of two-year colleges. Furthermore, the course should actively involve students in the process of their

education and provide them with useful tools of their careers in postsecondary education.

To meet these criteria, we redesigned our course on the two-year college to focus on having students create a hypothetical college applying futures research techniques in the strategic planning process. While making decisions about the administrative structure, the curriculum, and other services of the college, the students would (we hoped) master both the factual information about two-year colleges as well as selected futures research techniques and perspectives useful in the process of strategic planning.

The Course

The course objectives were developed directly from the considerations outlined above. Students would:

1. develop a perspective of the two-year college as an organization and as a social institution;
2. understand the nature (the philosophy, curriculum, etc.) of the contemporary two-year college;
3. identify major issues facing the two-year college today and in the future, and to develop sophistication in evaluating these issues; and
4. develop skill in using selected futures research methods in studying two-year colleges and their interaction with their present and future environments.

To implement these objectives, students became, in effect, members of a task force whose mission was to design a two-year college to be located near

Chapel Hill. Dubbed Orange County Community College (OCCC), the institution would serve a three-county area with a population of more than a quarter-million. For purposes of this exercise, the class was to assume that Durham Technical Institute (in the next county) did not exist.

The syllabus contained the course objectives, a description of the course format, general procedural instructions, the grading scale, a study guide, selected readings[2], and a schedule of class meetings and deadlines. The study guide consisted of 73 questions, arranged under fourteen topic headings (see Appendix A for the study guide). The topics are those usually included in courses on the two-year college, but in this case they provided a framework for the questions the students would need to consider in designing the college. For example, Topic III: "Organization, Administration, and Finance," included the following questions (among others):

-"What will be the functions of the Board of Trustees at OCCC?"
-"How will board members be chosen, and how long will they serve?"
-"What form of state control will OCCC be subject to?"
-"Will there be collective bargaining at OCCC?"

After three introductory lectures in which students were given an overview of the two-year college and its history, they formed an "environmental scanning committee." The purpose of an environmental scanning committee is to conduct an environmental analysis (survey of threats and opportunities in the environment). This requies first, developing a scanning taxonomy (topic headings for organizing data gleaned from scanning printed resources), and identifying information sources to be reviewed (books, magazines, newspapers, journals,

etc.). Each member of the committee was expected to write about fifteen abstracts of articles on subjects which reflected either threats or opportunities to the new college. The scanning committee reconvened periodically throughout the semester to identify emerging issues, trends, and events which might affect OCCC in the future. (See Figure 1 for the sequence of course activities.)

When the class had established the scanning system, they were then organized as the OCCC planning committee. As members of the planning committee, they designed the administrative structure, services, and curriculum of the college. Although the same students formed both committees, the separation of the two roles was vital in order to emphasize their different functions; they had to learn to appreciate the divergent, though complementary, functions of the two committees. The planning committee reviewed the recommendations of the scanning committee, conducted analyses of the scanning data, and commissioned issue briefs (in-depth analyses) from the scanning committee on topics they deemed particularly important. Theoretically, these exercises would enable the planning committee to make the best strategic decisions about the design of the college.

Throughout this process, the planning committee used a variety of "outside consultants" to help them in their work: the instructor, staff members of the North Carolina Department of Community Colleges, and the presidents and staff members of several North Carolina community colleges. Their final report and plan for the college serves as the basis for the remainder of this chapter.

Designing Orange County Community College

One of the first activities of the scanning committee was to perform an

"internal scan" to identify the events, trends, and emerging issues which, in their judgment, could affect the growth, development, mission, administration, and curriculum of OCCC. The internal scan formed the basis of the scanning taxonomy for the college. Their taxonomy, which appears at the end of the planning document in Appendix B, was also based on taxonomies from other organizations such as The American Council of Life Insurance Companies' Trend Assessment Program, the United Way's Environmental Scanning Program, and the Enviornmental Scanning Project of the University of Georgia's Continuing Education Center[3].

Throughout the course of the semester the scanning committee examined a variety of books, magazines, newspapers, journals, and other printed material to identify signals of change that could affect the organization and the curricular offerings of OCCC. The main criteria for selecting information resources was diversity. For example, students were encouraged to review major national and regional newspapers, eg., The New York Times, The Wall Street Journal, The Miami Herald, The Chicago Tribune, The Los Angeles Times, The Christian Science Monitor, USA Today, The Chronicle of Higher Education, and Education Week. In addition, they were asked to read selected magazines/journals which provide good scanning information in a variety of areas. For example, in the social/demographic area, they reviewed American Demographics, Public Opinion Quarterly, and Public Opinion. In the technological sector, they read High Technology, Datamation, BYTE, Computer World, Discover, Technological Forecasting and Social Change, and Information World. In the economic sector, they scanned Business Week, The Economist, Fortune, Forbes, Money, Inc., and the Monthly Labor Review. In the political sector, they reviewed New Republic, The National Review, The National Journal, and Mother Jones. In addition, they read

magazines and journals that spread across these sectors, eg., Vital Speeches of the Day, Across the Board, Naisbet Trend Letter, Kiplinger Washington Letter, Time, Newsweek, U.S. News and World Report, Future Survey, and The Futurist.

Each student was required to write abstracts of the articles and file the abstracts by title under the appropriate category in the taxonomy. This system made possible the quick review of articles pertinent to any specific problem under consideration, such as discussion of new laws affecting higher education or the impact of anticipated demographic shifts.

As environmental scanning "monitors," the students followed syllabus guidelines which explained how to write abstracts of (1) objective descriptions of the current environment and (2) warning signals of potential change (see guidelines in Appendix C). They were instructed to search for articles which identified such phenomena as changes in societal values, increases in worker dissatisfaction, and changes in life expectancy. They especially looked for important trends which would form the context within which the college would be operating in the future.

At specific times throughout the semester, the scanning committee systematically examined the abstracts for trends and events which might affect the design of the college. They could then choose to engage in a probability-impact exercise in order to evaluate the relative importance of the issues.

The Use of Probability-Impact Charts

A probability-impact chart is a powerful tool that can be used to evaluate and rank significant issues. The chart combines an estimation of the probability that an event will occur (or that a trend will reach as certain

level within a particular time period) with an assessment of the degree of positive or negative impact on the organization. It is often easier to assess the probability and impact of specific events, such as the passage of particular laws affecting higher education, than more amorphous "emerging issues," such as the impact of new technologies on college instruction. Nonetheless, even these loosely-defined phenomena can be assessed with some confidence by using a probability-impact chart. For example, articles about the growing importance of telecommunications and other new technologies for instructional purposes led the scanning committee to declare "the growth of nontraditional instruction in colleges" a significant emerging issue. The committee members evaluated this issue by asking two questions:

1. What is the probability (on a 0-100 scale) that, by 1995, 50% of community college instruction will be "nontraditional"?
2. What will be the degree of positive and negative impact on the college (on a -100 to +100 scale)?

Each person marked the chart at points which reflected his or her individual estimate of probability and impact; their responses were then transferred to a single chart (Figure 1). Committee members differed considerably regarding the

---

Insert Figure 1 about here

---

probability of the event as well as its positive impact, but had initial consensus on their estimation of the negative impact.

After displaying the initial vote (which did not reflect overall consensus)

students were requested to explain their reasons for placing their probability and impact estimates where they did. After this discussion, a second vote was taken to see if closer agreement could be obtained. The twofold purpose of the exercise is to reach consensus, if possible, and more importantly, to elicit the reasoning behind each individual's judgments. As is typical in the Delphi procedure, such discussion helps the group decide the relative importance of issues and events. Events with a low potential impact on the institution can usually be dismissed from further consideration. However, all degrees of probability are important to planners. For example, if a high probability event does not occur, it represents a surprise developmment which would affect planning; similarly, a low probability event that does occur also represents an unexpected eventuality which would affect planning. Therefore, all high-impact events, regardless of their degree of probability, must be carefully analyzed and evaluated.

In this case, the second round of discussion yielded compelling arguments that there was an even chance that 50% of community college instruction will be non-traditional by 1995, and that this situation would have substantial positive and negative consequences. Therefore, the committee decided to pursue the implications of this event through an impact network (see below).

Use of Impact Networks

Those events which students felt would greatly affect OCCC were further analyzed using impact networks. As described by Morrison, et al., an impact network is a brainstorming technique which yields a graphic representation of the possible impacts of a particular event. To continue the analysis of the issue of nontraditional instruction, students constructed an impact network in

which they sought to identify all significant effects, both positive and negative, if 50% of the curriculum were to be delivered by nontraditional means (see Figure 2).

Insert Figure 2 about here

First-order impacts are recorded on the chart around the initial proposition and linked to it by single lines. Among the first-order impacts were: reduced need for a large central campus, new roles for the faculty, the need for more multipurpose classrooms, and less student-faculty contact. After identifying first-order impacts, they considered possible second-order impacts (linked to the first-order impacts by double lines). It would have been possible, of course, to continue the process through the third- and fourth-order impacts, but in this case they felt it was not appropriate.

Impact networks are valuable tools because they are simple to use and because they can be used to identify a wide range of impacts very quickly. By exploring the range of second-, third-, and even fourth-order impacts, a group can reach new insights into the <u>total impact pattern</u> of a given event. For example, the first-order impact "smaller central campus" led naturally to the second-order impact "less capital expenditure," but other first-order impacts, "increased expenditure for technology" and "more multipurpose classrooms," would tend to counterbalance the savings on the reduced physical plant. Similarly, small positive first-order impacts may give rise to a wide range of negative second-order impacts which would reduce or eliminate the positive value of the first-order impacts. Also, higher-order impacts may magnify the influence of lower-order impacts far beyond the original estimation of their importance

(e.g., "displaced faculty" leading to "increased union activity").

Another event of high probability and high impact was the proposal recently introduced by Senator Pell to tie a grade point average to student aid; i.e., students receiving federal aid would need to maintain a "C" average or better in order to continue to qualify. Among the implications of this event (see Figure 3) were: (on one hand) loss of potential students, particularly minority

---

Insert Figure 3 about here

---

students, with a subsequent loss of financial and community support, but (on the other hand) a more selective student body. The implications of the analysis for planning OCCC was the need to develop an "early warning system" to prepare faculty and counseling staff for increased demands on their counseling and academic support activities.

Acting as the planning committee, the class singled out important issues on which more in-depth analysis was needed to develop plans for the college. For example, they decided they needed to consider the use of telecommunications as an alternative instructional delivery system, a decision which would unquestionably affect the design of the curriculum. They therefore commissioned an issue brief on the effects of new technology on instruction at other educational institutions. Other issue briefs included studies of the proposed North Carolina state lottery and its possible effect on college finances, the trends in federal policies regarding aid to higher education, and the danger of educational malpractice suits.

Environmental Analysis

To determine whether or not there will be a sufficient market for its services, institutional planners must also perform a local environmental analysis. Since marketing is a planning issue, the OCCC Planning Committee conducted the analysis, following the same environmental scanning techniques described above but focusing on events and issues at the local level. First they had to ascertain that there were enough prospective students for OCCC to be a successful institution, develop a profile of those students, and finally determine what their demands for training were likely to be. Answers to these questions were derived through an analysis of population demographics, college attendance rates and trends, and labor and employment trends in the region to be served by OCCC.

The State of North Carolina sets 400 students as the minimum necessary for a community college or technical school to reveive state funds, but OCCC would need many more than the minimum to be a successful institution. In brief, the planning committee's analysis of population trends in the three-county area revealed that the population was and is growing fairly rapidly, and projections by state agencies indicate further rapid growth for the future (from 276,404 in 1984 to over 310,000 by the year 2000). The North Carolina Department of Community Colleges guidelines state that an area needs a population of at least 100,000 to support a successful community college, well below the region's current population. In addition, the planning committee examined population projections with regard to race, sex, and age groupings, concluding that the area will have ample numbers of people who fit the traditional profile of community college students. Moreover, the large number of retirees in the area has implications for curriculum planning (developing courses and programs of

interest to that group).

The planning committee also analyzed local and national educational trends (percentages of high school graduates and college graduates, two-year college attendance figures, etc.). They concluded, among other things, that there is still room for growth in two-year college attendance in this region and that Orange County Community College would not experience difficulty in attracting an increasing number of students over at least the next decade. Existing national community college enrollment patterns indicate that the college can expect approximately one-fourth of its students to be college-transfer and the remainder to be in vocational/technical or in general interest areas.

The planning committee examined labor and industry statistics in order to establish the direction of current and future area employment trends. They discovered that local replacement needs for lower or mid-level managers will most likely be higher than for other occupational groups, indicating a need for including management-related courses at OCCC's curriculum. They also found that, as in the rest of the country, the largest growth in new jobs will be in the service sector, and therefore courses and programs to prepare students for service occupations should probably be part of the curriculum. And, since office-related jobs account for three of the top six job growth areas, it would also be prudent to plan for an extensive program of secretarial science courses at OCCC. The rapid population growth in the district has already created a shortage of crafts workers, and the future demand for housing and others types of construction is not expected to diminish; therefore OCCC should seriously consider programs for training carpenters, plumbers, electricians, bricklayers, and maintenance mechanics. Since the textile industry, traditionally a major source of jobs in the area, is a declining industry and is not expected to grow

in the future, courses geared toward that industry would not be advisable. However, manufacturing growth is occurring in electrical machinery, printing, and foods, and training programs in these areas should probably be considered for OCCC's curriculum.

The planning committee also found evidence that a variety of other occupational areas will grow moderately or rapidly (depending upon the direction of certain future trends), e.g. information processing, recreation services, electronics, chemical and medical technology, and repair of data processing equipment, automobiles, and appliances. They concluded that OCCC's leaders would need to monitor and analyze local labor and economic trends to stay abreast of the training needs of the region.

The Plan for Orange County Community College

References to decisions the planning committee made on the basis of information derived from environmental scanning appear throughout their planning document (see Appendix B). For example, the recommendation for a strong program of direct student counseling was a direct result of the estimated impact of increased non-traditional instruction (from the impact network the class performed). Also, the set of planning assumptions for the curriculum were developed exclusively through their environmental scanning exercises.

The initial plan for OCCC is, therefore, the culmination of many hours of students researching issues, scanning articles, writing abstracts, debating probabilities, and making decisions about the structure and function of the college in its anticipated local and national environments. The plan contains many of the elements of a bona fide planning document, from the statement of institutional objectives through a description of specific institutional

programs to be offered by the college. But more importantly, it illustrates the strengths of applying selected futures research techniques in a strategic planning process to design a two-year college.

Lessons Learned

Students were asked to evaluate their experience (anonymously). They were unanimous about the value of learning futures research techniques and the value of interviewing senior two-year college administrators about major issues. They also appreciated the willingness of busy people to consult with them on the particular area of the OCCC plan for which they had first draft responsibilities. They were, however, less sanguine about the amount of work they had to accomplish in a relatively short period of time (16 weeks).

Since teaching this course, the first author and a colleague, Thomas V. Mecca, vice-president for planning and development at Piedmont Technical College, have developed a manual for linking environmental scanning with strategic management--ED QUEST. This manual describes a model which requires (1) identifying trends and events pertinent to the organization, (2) assessing the institution's strengths and weaknesses, (3) assessing the impact of critical trends and future events on the organization's strengths and weaknesses, (4) developing and assessing multiple scenarios, (5) selecting strategic options, and (6) incorporating the options into the strategic management process. We intend to use ED QUEST in the next version of the two-year college course. The class will devote the first three weeks to a review of the basic literature describing the nature of the contemporary two-year college in American society, including how it evolved. We will then move into a simulation exercise whereby each student will play a role on the OCCC ED QUEST team charged with the

responsibility of developing plans and policies for the stratetic direction of the college. Class assignments could include conducting interviews with selected two-year college leaders, writing abstracts of critical trends and possible events, developing a section of the OCCC Future Prospects Notebook (i.e., documentation of critical trends and events), recording selected ED QUEST sessions, writing a scenario, and designing strategic options in response to a selected scenario. (See Appendix D for the tentative guidelines to implement ED QUEST).

An alternative approach would be to design the course in conjunction with senior administrators at a nearby technical institute or community college where students could serve as assistants to members of that institution's ED QUEST team. Class assignments would be similar to the ones described for the OCCC simulation, but there would obviously be more interaction with college administrators and faculty. Most administrators seem willing to give an hour or two of their time for student interviews; but if students were working in support of the future direction of the college, administrators might spend many hours working with them. Students would not only have more "hands on" experience, they might also earn letters of recommendation from practicing administrators.

Given that the ED QUEST manual is still in the "beta" testing stage, the next course in the two-year college will need to be a simulation. By the end of the semester, however, the manual, which has been used in all day pre-conference workshops at the 1986 annual meetings of The American Association of Community and Junior Colleges and The Society for College and University Planning, should be ready for publication (currently scheduled for March 1987). At that time, the alternative of conducting the course in conjunction with practicing administrators will be actively explored.

BIBLIOGRAPHY—THE TWO-YEAR COLLEGE

I. OBJECTIVES AND FUNCTIONS OF THE TWO-YEAR COLLEGE

Blake, L. (1981). Coming of age. Community and Junior College Journal, 51, 26-29.

Clark, B. (1960). The "cooling out" function of higher education. The American Journal of Sociology, 65, 569-576.

Cohen, A. (1983). Leading the educational program. In G. Vaughan and Associates, Issues for community college leaders in a new era. San Francisco: Jossey Bass.

Eaton, J. S. (1985). Getting ready for excellence in education. Proceedings of the National Conference on Teaching Excellence and Conferences of Presidents. Austin, TX. (ERIC Document Reproduction Service No. ED 237122).

Eaton, J. S. (1985). Excellence: Is it a betrayal?, National Forum, 65, 29-31.

Gordon, S. (1983). A nation at risk. Community and Junior College Journal, 54, 14-15.

Karabel, J. (1972). Community colleges and social stratification. Harvard Educational Review, 42, 521-562.

Karabel, J. (1972). Open admissions: Toward meritocracy or democracy? Change, 4, 38-43.

Koltai, L., & Wolf, D. B. (1984). Critical issues facing the community college. Paper presented at the Colloquim on Critical Issues Facing the Community College. Los Angeles, CA. (ERIC Document Reproduction Service No. ED 242355).

London, H. B. (1982). Academic standards in the American community college: Trends and controversies. Washington, D.C.: Department of Education, National Commission on Excellence in Education.

McCabe, R. H., & Skidmore, S. B. (1983). New concepts for community colleges. In G. Vaughan and Associates, Issues for community college leaders in a new era. San Francisco, CA: Jossey Bass.

Nespoli, L., & Martorana, S. (1983). Tensions in defining community college missions: Problems or opportunity? Community College Review, 11, 3-11.

Palmer, J. C. (1983). How is quality measured at the community college? (ERIC Document Reproduction Service No. ED 231483).

Parnell, D. (1984). Community colleges at the forefront. Community and Junior College Journal, 54, 40-41.

Powell, J. P. (1984). Higher education: A select bibliography, vol. 4: 1976-83 and supplement to vol. 1. Kensington, Australia: University of New South Wales, Higher Education Research and Development Society of Australia. (ERIC Document Reproduction Service No. ED 250972).

Thompson, C. P. (1985). Maintaining quality with open access. Community College Review, 12, 10-14.

Townsend, B. (1984). Faculty role in clarifying the mission. Community College Review, 12, 4-7.

Turner, R. (1960). Sponsored and contest mobility and the school system. American Sociological Review, 25, 855-867.

II. HISTORY OF THE TWO-YEAR COLLEGE

Brunner, K.A. (1970). Historical developments of the junior college philosophy. Junior College Journal, 40, 30-37.

Cohen, A. (1984, February). The community college in the American educational system. Paper presented to the Study Group on the Condition of Excellence in American Education. (ERIC Document Reproduction Service No. ED 239701).

Creamer, D. G. (1983). Historical and contemporary perspectives on community college student services. Richmond, VA: Virginia Polytechnic Institute and State University. (ERIC Document Reproduction Service No. ED 233771).

Frankie, R. J., & Dubois, E.E. (1971). Community-junior college in historical and cultural perspective. School and Society, 99, 45-47.

Gerber, D.R. (1971). William Watts Folwell and the idea of the junior college. Junior College Journal, 41, 50-53.

Kelly, W., & Wilber, L. (1969). Junior college development in the United States. School and Society, 97, 485-497.

Vaughan, G. B. (1982). The community college in America: A pocket history. (American Association of Community and Junior Colleges' Pocket Reader No. 4). Washington, D.C.: American Association of Community and Junior Colleges. (ERIC Document Reproduction Service No. ED 220140).

Vaughan, G. B. (1985). The community college in America: A short history. Washington, D.C.: American Association of Community and Junior Colleges. (ERIC Document Reproduction Service No. ED 255267).

III. THE TWO-YEAR COLLEGE STUDENT

Bers, T. H. (1983, November). The promise and reality of women in community colleges. Paper presented at the Conference of the American Educational Research Association to the Special Interest Group on Women in Education, Tempe, AZ.(ERIC Document Reproduction Services No. ED 242365).

Blake, J. H. (1985, October). Higher expectations. Plenary Address of the College Entrance Examination Boars College Scholarship Service Assembly, San Francisco, CA.

Caparosa, C. (1985). Community college: A resource for postsecondary opportunities for the handicapped. Rehabilitation World, 9, 16-17, 43-46.

Dziech, B.W. (1983). Changing status of women. In G. Vaughan & Associates, Issues for community college leaders in a new era. San Francisco: Jossey Bass.

Governanti, M., & Clowes, D. (1982). Adults' motivations for attending a community college. Community and Junior College Quarterly, 6, 271-285.

Hartman, R. C. (1981). Fact sheet: Community colleges and handicapped students--concerns and research. Washington, D.C.: Department of Education.

Knoell, D. (1983). Serving today's diverse students. In G. Vaughn and Associates, Issues for community college leaders in a new era. San Francisco: Jossep Bass.

Martorana, S.V., & Sturtz, A.J. (1973). The occupational student. New Directions for Community Colleges, 1, 15-33.

Pantages, T.J., & Creedon, C.F. (1978). Studies of college attrition, 1950-1975. Review of Educational Research, 48, 49-101.

Tinto, V. (1975). Drop-outs from higher education: A theoretical synthesis of educational research. Review of Educational Research, 45, 89-125.

Willner, E. (1982). Characteristics related to students withdrawing from college. Community College Review, 10, 59-64.

IV. THE TRANSFER FUNCTION

Astin, A. W. (1983). Strengthening transfer programs. In G. Vaughan and Associates, Issues for community college leaders in a new era. San Francisco: Jossey Bass.

Bensimon, E. M., & Riley, M. J. (1984). Student predisposition to transfer: A report of preliminary findings. Los Angeles: Center for the Study of Community Colleges. (ERIC Document Reproduction Service No. ED 247963).

Higbee, J. M. (1973). Upper division colleges: An end to transfer hurdles. Community and Junior College, 43, 44-48.

Kintzer, F.C. (1973). The community college transfer student. New Directions for Community Colleges, 1, 1-14.

Knoell, D. (1983). The transfer function--one of many. New Directions for Community Colleges, 10, 5-17.

Kuznik, A. E., Maxey, E.J., & Anderson, D.D. (1974). Reverse transfers: A survey. Community and Junior College Journal, 44, 25-27.

Masat, F. E. (1980). Easing the trauma of transfer. Community and Junior College Journal, 50, 10-13.

Van Alstyne, C. (1974). The high cost of transfer: Hidden penalties. Community and Junior College Journal, 44, 12-14.

V. THE CAREER EDUCATION FUNCTION

Donald, D., & Evans, E. (1978). Career education: A comprehensive community college model. Community and Junior College Journal, 48, 8-9.

James, G., & Gill, E. (1976). Emphasis on education for careers: Pro and con. Community College Review, 3, 14-25.

Long, J. (1985). Vocational education in the community college: State of the art. Vocational Education, 60, 47-50.

Mehallis, G., & Mehallis, M. (1983). Vocational education in the community college: Defining our mission. Vocational Education, 58, 26-29.

Shoemaker, E.A. (1973). Community college: The challenge of proprietary schools. Change, 6, 71-72.

Verma, D. (1973). Occupational programs should include general education. Community College Review, 1, 61-65.

VI. GENERAL EDUCATION

Anderson, G.L. (1973). Half a century of general education. Intellect, 102, 41-42.

Case, C. H. (1983). Reformulating general education. In G. Vaughan and Associates, Issues for community college leaders in a new era. San Francisco: Jossey Bass.

Conrad, E. F. (1983). At the crossroads: General education in community colleges. Washington, D.C.: National Institute of Education. (ERIC Document Reproduction Service No. ED 229090).

Cross, K. P. (1982). Thirty years have passed: Trends in general education. New Directions for Community Colleges, 40, 11-20.

Eaton, J. S. (1982). General education: Challenges and choices. New Directions for Community Colleges, 40, 73-81.

Harris, J. J., & Johnson, L. (1975). Theoretical rationale: General education through an urban public community college can promote community development. The High School Journal, 58, 348-360.

Harrison, J. D. (1973). General education in the community college: A recent view. The Journal of General Education, 25, 83-93.

Morse, H. T. (1954). Liberal and general education--partisans or partners? Junior College Journal, 24, 395-399.

O'Banion, T., & Shaw, R. (1982). Obstacles to general education. New Directions for Community Colleges, 40, 59--71.

Rice, J. G. (1972). General education: Has its time come again? Journal of Higher Education, 43, 531-543.

Roark, D. (1984). Integrating general education with vocational studies. Community College Review, 12, 30-37.

Roueche, S., & Roueche, J. (1982). Literacy development: Foundations for general education. New Directions for Community College, 40, 31-37.

VII. THE OUTREACH FUNCTION

Atwell, C. A., Vaughan, G., & Sullins, W. (1982). Reexamining community services in the community college: Toward consensus and commitment. Washington, D.C.: National Institute of Education. (ERIC Document Reproduction Service No. ED 220138).

Bazik, M. (1985). A planning system for continuing education divisions: A model. Community Service Catalyst, 15, 14-17.

Demott, B. (1975, September 20). Adult ed--the ultimate goal. Saturday Review, pp. 27-29.

Palmer, J. (1983). The community service program. Community Service Catalyst, 13, 22-24.

Palmer, J. (1984). Developing and managing the community service program. Community Service Catalyst, 14, 25-27.

Van Dyne, L. (1973). Flathead valley community college: A college that believes in "community". Change, 5, 52-55.

VIII. DEVELOPMENTAL EDUCATION

Barshio, D. E., & Guskey, T. R. (1983). Providing remedial education. In G. Vaughan & Associates, Issues for community college leaders in a new era. San Francisco: Jossey Bass.

Erickson, M. (1978). Developmental courses are creditable. Community College Frontiers, 6, 18-22.

Fadale, L., & Winter, G. (1985, March). Assessing the effectiveness of developmental/remedial programs in two-year college. Paper presented at meeting of the American Educational Research Association. (ERIC Document Reproduction Service No. ED 254542).

Miller, M. (1984). Developmental education and speech communication in the community college. Communication Education, 33, 5-11.

Piland, W., & Pierce, D. (1984). Remedial education in the states. Community College Review, 12, 16-20.

Roueche, J. (1978) Let's get serious about the high-risk student. Community and Junior College Journal, 49, 28-31.

Roueche, J., & Armes, N.R. (1980). Basic skills education: Point-counterpoint. Community and Junior College Journal, 50, 21-24.

IX. STUDENT PERSONNEL SERVICES

Elsner, P. A., & Ames, W. C. (1983). Redirecting student services. In G Vaughan & Associates, Issues for community college leaders in a new era. San Francisco: Jossey Bass.

Friedlander, J. (1984). Delivering academic assistance: Exemplary approaches. Journal of Developmental and Remedial Education, 7, 13-15.

Goodman, L.H., & Beard, R.L. (1976). An analysis of reported counseling services in selected public community colleges in the southeastern United States. Community/Junior College Research Quarterly, 1, 81-90.

Matson, J.E. (1971). Student personnnel services in two-year colleges: A time for charting new directions. Peabody Journal of Education, 48, 276-281.

Thurston, A. S., & Robbins, W. A. (1983). Counseling: A crucial function for the 1980's. New Directions for Community Colleges, 43. (ERIC Document Reproduction Service No. ED 235865).

X. THE PROFESSIONAL STAFF: FACULTY

Boggs, G. R. A response to uncertainty: The increased utilization of part-time instructors in American community colleges. Community and Junior College Quarterly, 8, 5-17.

Brower, F. B. (1973). Community college: Selecting and training new teachers. Change, 5, 56-57, 63.

Guthrie-Morse, B. (1979). The utilization of part-time faculty. Community College Frontiers, 7, 8-17.

Jamerson, F. (1979). The community college teacher: A confused identity. Community College Frontiers, 7, 4-7.

Rohfeld, R. (1984). Faculty growth through community development. Community Service Catalyst, 14, 8-11.

Smith, M. L. (1984). A study of the status of tenure in the nation's public two-year college. San Marcos, TX: Southwest Texas State University. (ERIC Document Reproduction Service No. ED 250029).

XI. THE PROFESSIONAL STAFF: ADMINISTRATION

Bers, T. (1980). Trustee characteristics and decision-making among suburban and rural community college trustees. Community and Junior College Research Quarterly, 4, 249-262.

Blocker, C. E. (1972). The community college president. Peabody Journal of Education, 19, 253-259.

Campbell, D. F., and Associates. (1984). Leadership strategies for community college effectiveness: Outcomes of the North Carolina community college presidents' leadership institute. Raleigh, NC: North Carolina State University, Department of Adult and Community College Education. (ERIC Document Reproductions Service No. ED 251136).

Hall, R. A., & Alfred, R. L. (1985). Applied research on leadership in community college. Community College Review, 12, 36-41.

O'Daniel, D. (1984). Microcomputer applications for community college administrators. New Directions for Community Colleges, 12, 61-69.

Roueche, J., & Baker, G. A. (1984). Community college leadership for the '80s. Bookshelf Series #1. Washington, D.C.: American Association of Community and Junior Colleges.

XII. INSTRUCTION

Angel, D., & McCusker, B. (1983). Survey reveals dramatic growth of computer use. Community and Junior College Journal, 53, 23-25.

Callahan, L. A. (1977). Quality and cost-effectiveness through skills centers. Community and Junior College Journal, 48, 27-29.

Dellow, D. A., & Poole, L. H. (1984). The microcomputer revolution and its impact on community colleges. New Directions for Community Colleges, 12, 5-11.

Duffy, K., & Fendt, P. (1984). Trends in adult learning: Implications for community college education. Community College Review, 12, 41-47.

Heermann, B. (1984). Computer-assisted adult learning and the community college response. New Directions for Community Colleges, 47, 81-88.

Keeton, M. (1983). Three hypotheses on good teaching. In Celebrating teaching excellence: Proceedings of the national conference on teaching excellence and conference of presidents. Austin, TX. (ERIC Document Reproduction Service No. ED 2371221).

Palmer, J. (1984). Sources and information: Microcomputers. New Directions for Community College, 47, 109-115.

Roueche, J. (1983). Wanted: Teaching excellence in the community college. Community College Review, 10, 52-57.

Roueche, J.E., & Watkins, K. (1980). Increasing teaching effectiveness. Community College Frontiers, 8, 14-17.

Stalcup, R., & Hall, R. (1979). Instructional TV and the community college. Community College Frontiers, 8, 14-17.

Stewart, B.F., & Duffy, B. (1979). Telenetworking. Community and Junior College Journal, 50, 21-23.

Wilson, R. E. (1972). Administering instructional programs in the community junior college. Peabody Journal of Education, 49, 260-267.

XIII. ORGANIZATION, ADMINISTRATION, AND FINANCE

Adams, F. (1983). Evaluating, developing, and promoting commmunity college staff. New Directions for Community Colleges, 41, 95-103.

Alfred, R. (1984). Paradox for community college education in the 80s. Community College Review, 12, 2-6.

Birmingham, J.C., & Borland, D.T. (1980). Collective bargaining in the future: A study of administrator attitudes. Community and Junior College Research Quarterly, 4, 169-183.

Bogart, Q. J. (1984, April). Four structures for marketing in the American public community college. Paper presented at the Annual Convention of the American Association of Community and Junior Colleges. Washington, D.C. (ERIC Document Reproduction Service No. ED 253279).

Cohen, A. (1984). Helping insure the right to succeed: An ERIC review. Community College Review, 12, 4-9.

Eisenstein, F. (1983). Issues in strategic management for noncredit continuing education operations. Community Service Catalyst, 13, 18-21.

Hammons, J. O. (1983). Staff development isn't enough. Community College Review, 10, 3-7.

Koltai, L. (1978). Taxquake in Los Angeles. Community and Junior College Journal, 49, 24-28.

Lahti, R. (1979). Management and governance in the two-year college. Community College Review, 7, 12-16.

Martorana, S. V. (1978). Shifting patterns of financial support. New Directions for Community Colleges, 22, 1-13.

Martorana, S. V., & McGuire, W.G. (1976). Survey confirms trend toward state control. Community and Junior College Journal, 47, 8-9, 16-17.

Richardson, R. C. (1984). Management challenges, principles, and strategies for the 1980s. New Directions for Community Colleges, 12, 21-31.

Richardson, R. C. (1973). Governing the multi-unit community college system. Educational Record, 54, 41-44.

Richardson, R. (1967). Policy formation in the two-year college: Renaissance or Revolution? Junior College Journal, 37, 40-42.

Wattenbarger, J. L., & Heck, J. (1983). Financing community colleges. Gainesville, FL: Institute of Higher Education. (ERIC Document Reproductions Service No. ED 232751).

XIV. THE FUTURE OF THE TWO-YEAR COLLEGE

Breneman, D. W., & Nelson, S. C. (1981). The future of the community college. Change, 13, 17-25.

Cohen, A. M., & Lombardi, J. (1979). Can the community college survive success? Change, 11, 25-28.

Dubocq, T. (1981). American community college in crisis: A conversation with Robert H. McCabe. Change, 13, 26-31.

Kerr, C. (1980). Changes and challenges ahead for community colleges. Community and Junior College Journal, 50, 4-10.

McCarten, A. (1983). The community college mission: Present challenges and future visions. Journal of Higher Education, 54, 676-692.

Perkins, C., Powell, P., Seyler, D., Trachtenberg, S., & Tyree, L. (1984). What American will need from its community colleges by the year 2000. Community and Junior College Journal, 55, 36-40.

Schmid, R. G., & Russell, L. (1980). Plenty of clues to future trends. Community and Junior College Journal, 50, 28-31.

FIGURE 1

COURSE ACTIVITIES

Week #	
1	Course Orientation -- Explanation of course procedures and objectives.
2	Lecture -- Characteristics and functions of the community college.
3	Lecture -- History and present status of the community college.
4	Discussion -- The external environment of the community college today; creation of the OCCC Scanning Taxonomy.
5	Discussion -- Class meets as OCCC Scanning Committee and engages in exercise of issue identification and analysis.
6	Discussion -- Class meets as OCCC Scanning Committee to perform environmental analysis.
7	Discussion -- Class meets as OCCC Planning Committee to establish the administrative framework for Orange County Community College.

8 Discussion — Class meets as planning committee to review scanning abstracts and commission issue briefs.

9 Discussion — Class meets as planning committee to draft personnel policies for OCCC.

10 Discussion — Class meets as scanning committee to survey student demographics; meets as planning committee to establish student personnel services for OCCC.

11 Discussion — Class meets as planning committee to draft instructional policy for OCCC; meets as the scanning committee to review remaining abstracts.

12 Discussion — Class meets as planning committee to establish the developmental, general education, and transfer curricula.

13 Discussion — Class meets as planning committee to establish career education and outreach curricula.

14 Discussion — Class meets as planning committee to examine emerging issues facing OCCC.

15 Presentation of the OCCC plan.

FIGURE 2
PROBABILITY-IMPACT CHART

What is the probability that by the year 1995, 50% of community college instruction will be "nontraditional"?

What will be the degree of positive and negative impact on the faculty of the community college?

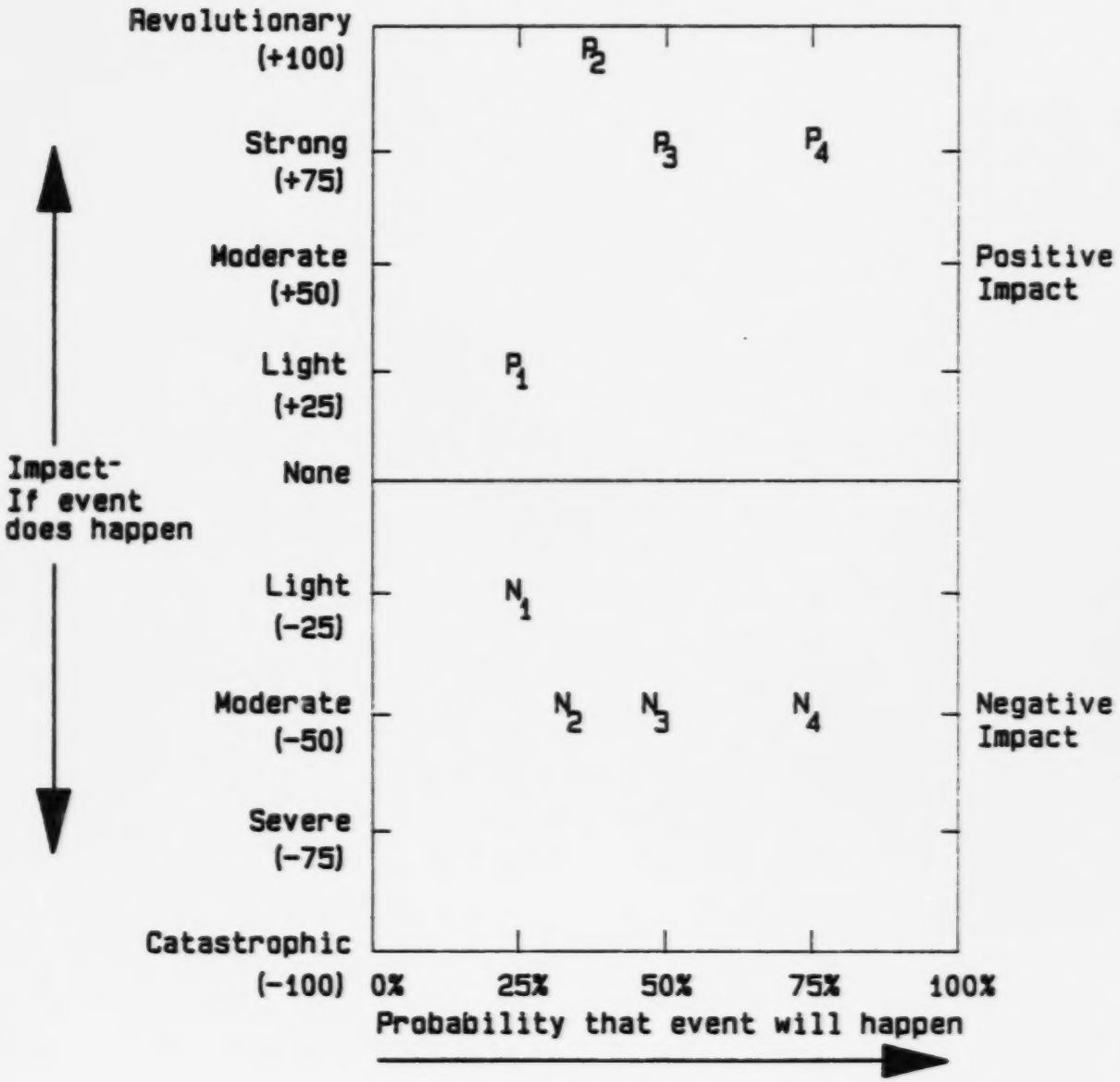


FIGURE 3
IMPACT NETWORK: "NON-TRADITIONAL INSTRUCTION"

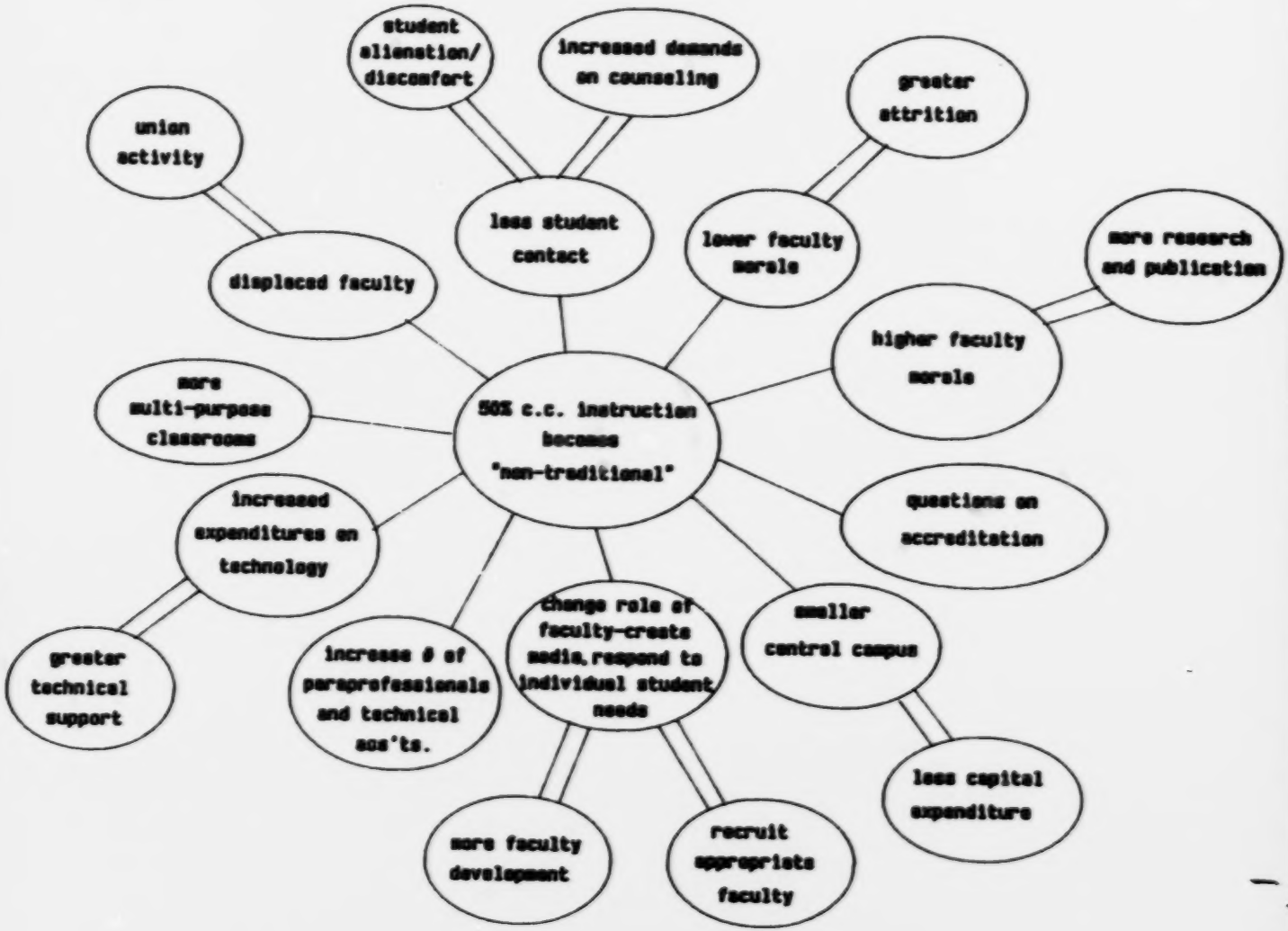
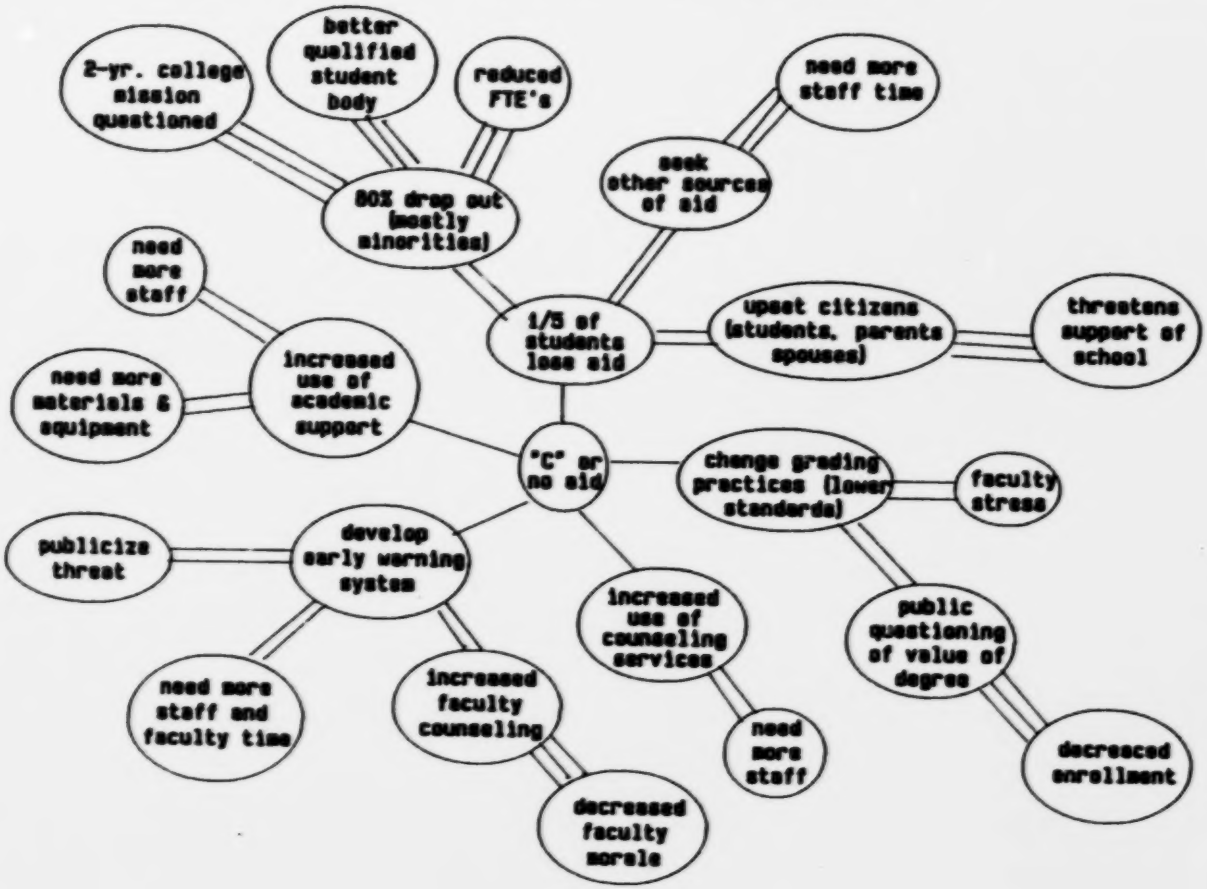


Figure 4

Impact Network - Assuming that legislation was passed requiring students receiving federal aid to maintain a 'c' average or better.


2-yr. college mission questioned
better qualified student body
reduced FTE's
need more staff time
seek other sources of aid
80% drop out (mostly minorities)
need more staff
1/3 of students lose aid
upset citizens (students, parents spouses)
threatens support of school
need more materials & equipment
increased use of academic support
'C' or no aid
change grading practices (lower standards)
faculty stress
publicize threat
develop early warning system
increased use of counseling services
public questioning of value of degree
need more staff and faculty time
increased faculty counseling
need more staff
decreased enrollment
decreased faculty morale

FOOTNOTES

[1]We extend our appreciation to David Austell, Linda Lee, Jim Pierce, and Kenneth Whitehurst, the four students whose hard work in the class made it such a success.

[2]Textbooks used in the course were: Cohen and Brawer's, The American Community College; the Publication Manual of the American Psychological Association; and Morrison, Renfro, and Boucher's, Futures Research and the Strategic Planning Process: Implications for Higher Education. These materials were supplemented by professional journal articles reproduced by a local copy shop (see Bibliography).

[3]The ACLI TAP program's taxonomy may be obtained from Sharon C. Meluso, Trend Analysis Program, American Council of Life Insurance, 1850 K Street, N.W., Washington, D.C. 20006-2284. The United Way taxonomy may be obtained from Linda Forbes, United Way of America, 701 North Fairfax, Alexandria, Virginia 22314. The University of Georgia Center for Continuing Education's taxonomy may be obtained from Donna McGinty, Assistant to the Director, The University of Georgia Center for Continuing Education, Athens, Georgia 30602.

Appendix A

Study Guide

The following questions are grouped topically to give direction to your learning about the two-year college and to provide direction to the planning committee's activities.

Topic I: Characteristics and Functions of the Two-Year College

1. What is the role and function of the two-year college in American society?

2. What elements differentiate the purposes and functions of traditional junior colleges, technical institutes, and comprehensive community colleges? Where does Orange County Community Coleege fit in this scheme?

3. Specifically, what should be the objectives of Orange County Community College? Are the objectives both realistic and relevant? Who will be best served by the college? Least? Will the college strive to meet "all the needs of all the people?"

Topic II: History and Present Status of the Two-Year College Movement

1. Who were the significant early leaders of the movement and how did they influence its development?

2. Why were junior colleges established initially?

3. How have the functions of the two-year college changed over the years? What forces account for these changes?

4. What is the present status of the movement?

5. What is the relationship between the "open door policy" and problems of educational standards in the two-year college?

Topic III. Organization, Administration, and Finance

1. What would a typical organization chart for a community college look like? How will the organization of OCCC compare with this scheme?

2. What two approaches to governance are now being used in community colleges? Which will be used at OCCC?

3. In what ways are community colleges usually financed? How will OCCC be financed?

4. What are the advantages and disadvantages of the various forms of local

control now in use? What form of local control is envisaged for OCCC?

5. What are the advantages and disadvantages of the forms of state control/coordination of community colleges? What form of state control will OCCC be subject to?

6. Specifically, what form will the administrative structure of OCCC take? What functions will the various administrators serve? What divisions/departments will it have?

7. What will be the function(s) of the Board of Trustees at OCCC? How will board members be chosen, and how long will they serve?

8. How will OCCC be governed? Will there be collective bargaining?

Topic IV: The Professional Staff: The Two-Year Administration

1. What is the role of the typical community college president? What personal and professional characteristics should the OCCC President have?

2. What personal characteristics should a member of the OCCC Board of Trustees possess?

Topic V: The Professional Staff: The Two-Year College Faculty

1. What generally are the attitudes, backgrounds, and socioeconomic status of two-year college faculty members? How do these differ across the major instructional areas of the college? (e.g. college transfer, vocational-technical, etc.)

2. What does research reveal about typical faculty attitudes in the two-year college, especially with respect to determinants of positive and negative attitudes? Do methods of "improving" attitudes seem to work? Will the administration of OCCC attempt to work on this problem?

3. What are the major problems, issues, and concerns of the faculty, and how have these changed over the years? (Especially with respect to the concepts of rank, teaching doctorates, teaching unions, load requirements, new teaching techniques, and research.) What problems and concerns do you anticipate for the faculty of OCCC?

4. What are the major components of a comprehensive inservice development program for faculty? Will OCCC have such a program?

5. Specifically with regard to Orange County Community College, what recruitment policies and guidelines should be followed in order to acquire the best faculty for the college? What personnel and governance policies should be followed in order to reduce turnover and promote career development?

Topic VI: The Two-Year College Student

1. What are the major reasons students choose to attend a two-year college?

2. How do the aspirations and interests of two-year college students compare with their abilities and performance?

3. What are the typical problems two-year college students face? How do the colleges attempt to help them find solutions to their problems?

4. What are typical students like in two-year colleges with respect to family background, personal backgrounds, preparation, objectives, learning styles, abilities, etc.?

5. What will the "typical" students be like at OCCC? How will students at OCCC compare to students at other two-year colleges? What types of non-traditional students will be served? Will most of the students who enter OCCC receive credentials?

Topic VII: Student Personnel Services

1. What differences exist among the functions of guidance, counseling, student activities, and student personnel services?

2. Why do two-year colleges provide student personnel services?

3. What are the purposes and responsibilities of a student personnel program?

4. What non-instructional services will be offered at OCCC? What will be the counselor/student ratio? How will students be advised into the various curricula? Will the "cooling out" function be in evidence?

5. At OCCC what tests will be administered to incoming students? Will anyone be turned away? What types of financial aid will be available?

6. How extensive will the student activities program be at OCCC? How will veterans be served? What services will be provided for evening students?

7. What is the relation of academic advising, student counseling, entrance assessment, placement procedures, developmental programming, and retention?

Topic VIII: Instruction in the Two-Year College

1. How do the claims of instructional excellence made by two-year colleges compare to their practices?

Topic XI The Transfer Function

1. What forces have influenced the development of the transfer curriculum in two-year colleges?

2. What types of transfer programs have been developed in two-year colleges? What kind of transfer program will exist at OCCC?

3. What is the record of performance and retention of transfer-oriented student: (a) in the two-year college and (b) when they transfer to the four-year colleges and universities?

4. What are the typical problems that two-year college transfer students face at the four-year colleges and universities? What steps could be taken to alleviate these problems at OCCC?

Topic XII The Career Education Function.

1. How well have two-year colleges performed in career education?

2. What kinds of career programs have been developed in the two-year college. What kind will OCCC have?

3. What role do citizen advisory committees play in the occupational curriculum at two-year colleges? Will they have a role at OCCC?

4. What measures would ease the disparity between academic education and career (job related) education?

5. Can career programs be justified in light of their relatively limited enrollments and high costs?

6. What kinds of problems do two-year colleges face in developing occupational curricula and what might be done to solve these problems at OCCC?

7. Will proprietary schools or industrial training programs present a threat to career education at OCCC?

Topic XIII: The Outreach Function: Adult Education and Community Service.

1. What are the definitions of community college adult education and community service?

2. Should community colleges provide adult education and community services?

3. What types of programs do two-year colleges offer in adult education and community services.

4. What problems stand in the way of the two-year college in its effort to provide adult education and community services? How can these problems be solved at OCCC?

2. What innovative approaches to instruction are being implemented at two-year colleges?

3. What factors are necessary to facilitate innovation and instructional improvement at the two-year college?

4. What factors tend to prevent the instruction at two-year colleges from reaching its full potential?

5. What standards of excellence will OCCC aspire to? How will the college promote instructional innovation and improvement?

6. Who will develop the various curricula at OCCC?

7. Will curriculum programs be offered at night as well as in the daytime?

Topic IX: Developmental Education

1. How many full- and part-time students will be enrolled in the developmental curriculum at OCCC?

2. What is the profile of a "typical" student enrolled in most community college development programs? How will this profile compare to that of OCCC's developmental students?

3. What methods are being employed to serve these students? How will OCCC serve them?

4. What are the issues and problems involved in serving these students?

5. Should the community college be involved in the business of offering developmental education courses?

6. How will the developmental program be integrated with the rest of the curriculum at OCCC?

Topic X General Education

1. What is general education? What types of programs or approaches for general education are utilized at the two-year college level? What approach will be used at OCCC?

2. Should general education be an important part of the two-year college curriculum? Will it be important at OCCC?

3. What are some of the curriculum problems in general eduction and how will these problems be solved at OCCC?

Topic XI The Transfer Function

5. What effort will the OCCC make to reach non-traditional students? What information services will be required? Will extension courses be offered through the continuing education program?

6. Will any programs be offered for prison inmates, the elderly, and the mentally retarded? Will the institution serve new industry in the area? How will OCCC cooperate with business and industry? What community services will be offered?

7. Well the facilities be accessible for the handicapped? Will the facilities be flexible (geared to a variety of uses)?

Topic XIV: <u>The Future of the Two-Year College</u>

1. What external and internal factors are likely to have a significant bearing on the future of the two-year college?

2. What current issues affect the organization and operation of two-year colleges?

3. What are the major issues and controversies regarding the role of the two-year college in American education?

4. What seems to be the prospect for the community college concept to be adopted by other countries?

APPENDIX B

ORANGE COUNTY COMMUNITY COLLEGE INITIAL PLAN

Institutional Objectives

Orange County Community College, established under the provisions of North Carolina Statutes 115-1, will operate as an open door institution. In keeping with the stated philosophy of the North Carolina Community College system, " . . . a philosophy of total education; a belief in the incomparable worth of all human beings . . . whose talents (however great or however limited or however different from the traditional) the state needs and must develop to the fullest degree . . .", the college is established for the following purposes:

1. To provide postsecondary occupational education so that individuals may develop the skills to enter a trade or vocational occupation.

2. To provide educational opportunities so that individuals may improve and upgrade their occupational skills in occupations in which they are presently employed.

3. To provide the opportunity for basic skills improvement through high school completion, vocational advancement, and activities to enhance personal growth and development.

4. To provide college transfer programs so that individuals will have an avenue to continue education beyond the first two years of college.

5. To provide training programs to meet the changing needs of area industry.

6. To be sufficiently flexible to meet the changing needs of the community served by the college.

7. To provide avenues for high school students to participate in college level academic and technical/vocational curricula.

Organization and Administration

Orange County Community College will be governed by a Board of Trustees, selected in the following manner:

1. Four members to be selected by the county commissioners of the three counties served by the college; two from Orange county, and one each from Durham and Chatham counties.

2. Four selected by the school boards; two each from the Chapel Hill-Carrboro School Board and Orange County School Board.

3. Four appointed by the Governor, in accordance with state codes.

4. One student member - the President, OCCC Student Government, Ex-officio

The Board members will serve terms of two years, with the opportunity of succession, with one-fourth rotation every year.

The responsibilities of the Board of Trustees will be those as described by John Nason in the Association of Governing Board Reports, Jan./Feb., 1976:

1. Selection, nurturing, and termination of the President.
2. Financial support and management.
3. Maintenance and expansion of the physical plant.
4. Public relations.
5. Clarification of purposes.
6. Assessment of performance in meeting purposes.
7. Bridging the gap between the community and campus.
8. Preservation of institutional independence.
9. Court of final appeal.
10. Self-evaluation.

The most important task of the new Board of Trustees will be the selection of the first president of the college. It is imperative that the Board articulate the mission of the college appropriately in the recruitment and selection of the president. The OCCC Planning Committee has identified the following characteristics considered to be essential in the new president. The president must be a planner, a leader, an articulator, a manager, a teacher, and a communicator. The president must have good interpersonal skills and genuinely like students. The president must be community-oriented, willing to maintain a high degree of visibility. The president must have a history of involvement in education, with teaching experience in the two-year college. Above all, the president must be committed to the goals of the institution.

In keeping with the principles established in Peters and Waterman's In Search of Excellence, the administrative structure of the college will be relatively flat. The president will be the chief executive officer, reporting directly to the Board of Trustees. Deans responsible for the areas listed below will report directly to the president.

1. Dean of Student Affairs - counseling, placement, admissions, student records, testing, financial aid.

2. Dean of Community Service - public relations, continuing education, conference center.

3. Dean of Business Affairs - budgeting, bursars office, physical plant, auxiliary enterprises.

4. Dean of Academic Affairs - curriculum programs, basic education, developmental studies, co-operative education, learning resource center.

In addition to these Deans, an Institutional Research and Planning Officer will report directly to the President.

Finance

Orange County Community College will be financed through a variety of funding sources, typical of all colleges in the North Carolina Community College System:

1. State tuition - at a rate established by the state.
2. State funds - allocated on the basis of a formula.
3. Local taxes - requested from the county governments of the three counties served.
4. Student fees.
5. OCCC Foundation - discussed later in this document.
6. Other - federal and private grants obtained through the development office.

The Board of Trustees will appoint a 20 member Board of Visitors, charged with the responsibility of establishing an Orange County Community College Foundation. The Board of Visitors will be appointed by the College Board of Trustees, upon the recommendation of the college administration. The Board of Visitors will be responsible for setting priorities for fund-raising, working with the Development Office, and acting as liason with local industry executives and philanthropists. The speedy establishment of a foundation will be critical to the success of the college in maintaining a solid financial base in times of shrinking federal and state dollars.

Student Personnel Services

The total development of students at Orange County Community College requires an array of services which are both flexible enough to meet the individual needs of OCCC constituents and comprehensive enough to enhance the educational experience in the community college. The counseling function is key to the success of students within our institution, and we adopt as our governing principle for this division the following statement found in the set of philosophy statements which accompany Title 16, Chapter 4, of the North Carolina Administrative Code:

> This counseling service is the first of three essential parts of an open door institution. The student must be helped to find the educational program that is best for him. If he is found ready, he can enter directly the program of his choice. If he is found not ready, his choice may be redirected to another program better fitted to his ability, educational background, and needs . . . .

We not only endorse this concept of counseling for students as a part of the open door philosophy of OCCC but also work to achieve its implications by pledging full human, educational, and technical resources of the college to the student personnel services division that it may achieve its goals.

The OCCC Student Personnel Services Division shall provide support services for full and part-time students in the areas of guidance and counseling, registration, extracurricular activities, recruitment, and orientation. To achieve the goals of each area, the division will commit its resources to create innovative outreach counseling services such as telecommunication links.

Twenty-one student personnel functions identified by the Committee on Appraisal and Development of Junior College Student Personnel Programs (Collins, 1967) form the nucleus of the division's operation. These functions are grouped under the major classifications: orientation, appraisal, consultation, participation, regulation, service, and organization.

Orientation of potential students to the programs of study at OCCC will be a major function of student personnel services and an integral part of the overall marketing strategy of the college. Recruitment strategies will include:

1. offering small group sessions in high schools, industry, shopping malls, and at social service delivery agencies designed to create an awareness of program choices at OCCC;

2. sharing data with high school counselors regarding career information, vocational tracking, and college transfer options;

3. developing multi-media advertising campaigns for print and broadcast media presentations; and

4. planning orientation courses (with credit) which will enable students to make an easy transition to the community college regardless of background, age or experiences.

Appraisal of student qualifications for admission and placement will be included in the duties of the student personnel services staff. A variety of paraprofessional, professional, and managerial staff should be involved in monitoring of student's initial contact with the college. Appraisal of students will be handled in the following manner:

1. Computerized testing of students for academic placement will be accomplished by the use of machine scorable answer sheets which are then processed either within the department through the institution's computer system or through contracting with a testing company in the Research Triangle Park.

2. Applicant appraisal can be assigned to a paraprofessional position with the responsibility of insuring that documents are received and meet the general eligibility requirements for the institution.

3. Health appraisal will be contracted through public health organizations in the community.

Consultation is a vital part of the counseling function of student personnel services and will be tailored to the needs of the student body:

1. Part-time counselors will assist in providing services to students on the main campus as well as in clusters where curricula programs are being offered away from the campus.

2. Computer assisted counseling will be integrated into the department with ample training for counselees so that maximum benefits may be derived from the process.

3. Student guidance will be initially provided by the counseling staff for new students with faculty advisement integrated into the student's sebsequent quarters of enrollment.

4. Counseling services will provide teleconferencing assistance for those students who are already involved in courses through computers located in their homes or at sites near their jobs.

The decentralization of traditional curricula offerings to remote areas of OCCC's service area will inevitably result in some discomfort for students who are more comfortable with traditional academic settings. Increased emphasis on direct counseling will be needed to offset any negative feedback or feelings of insecurity which may accompany increased reliance on technology. It is presumed from our impact network that some students in non-traditional course offerings will experience difficulty due to reduced "eye-to-eye" contact with an instructor. The availability of staff for consultation will be crucial to the success of more traditionally oriented students.

Participation of students in the extracurricular activities of the institution is an important part of the educational process. Provisions will be made to include an increasing number of part-time students in the college's programs.

1. The availability of athletic facilities in Orange County negates the need for building such facilities on this campus.

2. The Student Government Association (SGA) provides for the participation of students in a democratic process and heightens civic awareness. Therefore, the SGA will be organized to allow maximum participation by full and part-time students.

3. The student personnel services will provide academic recognition for full and part-time students whose achievements are deserving of honor.

Regulation of student conduct will be monitored by the student personnel services staff to insure compliance with rules of the Board of Trustees, the administration and the student government. Regulations governing social conduct will be determined from local policies, state laws, and student government agendas.

Services not covered in the above which are crucial to the success of the institution and are supportive of the student body will be provided by the student personnel services staff:

1. The financial aid process will be handled by a financial aid director with the assistance of the school's foundation staff. Industry will be encouraged to provide financial assistance for employees for job upgrading and self-improvement.

2. The placement process will be handled by a placement office which is charged with the tasks of determining job market demands and matching students with careers which utilize their training. The migratory pattern of the population in this region will necessitate the placement officer having access to regional and national employment opportunities.

Organizational policies within the purview of student personnel services will include program articulation with senior institutions as well as with public schools.

1. Student personnel services will be responsible for maintaining records of academic progress and their transfer to senior institutions or other educational institutions as requested by the student.

2. Articulation agreements will be enforced by the student personnel services division to assure senior institutions of quality programs of study.

3. In-service education of personnel in student services will be arranged by the dean of the division to insure up-to-date techniques are employed by employees of the division.

4. Program evaluation will be housed in the office for institutional research with input by the division dean in order to assess organizational effectiveness.

Community Services

The Community Service division adopts as its principal philosophy the components of the Report of the Commission on Goals for the North Carolina Community College System (1977) as they relate to "access to the open door" and "eliminating illiteracy." Those principles are:

1. The system (and OCCC) must bring education to the people.

2. Education must be offered at times that are convenient to the people.

3. North Carolinians must be made more aware of the educational opportunities available at their community colleges and technical institutes.

4. The needs of special groups must be recognized.

5. A functional literacy curriculum and sufficient supportive learning materials need to be developed and implemented . . . .

Most notably, the philosophy of the division is stated simply by Thomas Wolfe in You Can't Go Home Again--

> So then, to every man his chance--to every man regardless of his birth, his shining golden opportunity--to every man the right to live, to work, to be himself, and to become whatever thing his manhood and

his vision can combine to make him--this, seeker, is the promise of America.

Recognizing the availability of a wide range of continuing education programs in the area served by the OCCC, the division will provide courses and educational opportunities which will fill the void that exists between the public school offerings and the senior institutions offerings in the target area. Care will be taken to avoid duplication of services, especially those of publicly supported institutions, and to concentrate the resources of the college's continuing education program in areas where there is greatest need. The relatively low unemployment rate especially in the Durham-Chapel Hill area will mean potential students will probably have fewer hours to devote to class offerings; therefore, timing of courses, variety of offerings, and ease in registration will be key components of the marketing plan of A&CE offerings.

Legislative concern over the funding of avocational courses has been identified as a potential problem in the OCCC abstract L-1.2 and E-1.12. Careful planning by OCCC will be required for the college to continue meeting its obligation to the community in this area without placing undue burden on the resources of the institution, especially in terms of tax dollars allocated by the N.C. General Assembly.

Community Services is organized in three areas: instructional services, noninstructional services, and facilities services.

Instructional services will include courses designed to increase the cultural awareness of students in the OCCC community. These offerings will appeal especially to the projected 11.2 percent of the population who will be 65 and over by 1990, as well as to the broader population which may be technically trained and will be looking for enrichment activities to broaden their experiences. Also included will be a generous selection of courses designed to enhance skills needed for promotion or re-training due to expansion and replacement needs of various classes of workers.

Non-instructional services will involve coordination of programs with business, industry, and civic organizations. In addition, consultation concerning rapidly developing trends and fast breaking events which require immediate reorientation of personnel or programs will be provided. The Community Services Division may assume some of the research and development activities required to lay the groundwork for new and expanding industries in the area.

Facilities services will encompass the use of property and equipment by various organizations in the community consistent with the purposes, practices, and policies of OCCC. Exposure of the community to conference facilities will promote visibility of the institution in the service areas and represent a wise use of tax supported facilities , providing a better return on county commissioners' investment in capital outlays.

In addition to this group of services, we will add a compensatory education service which will provide adult basic education, adult high school programs, and general educational development tests. These programs should appeal to those who have not completed high school as reflected in the environmental analysis of educational trends.

Of the five organizational patterns identified by G. A. Myran (1969), the pattern most suitable for the nontraditional programs of OCCC are reflected in the community specialist model whereby staff members are located in the community rather than on campus. The decentralization of the staff will provide closer contact with the constituents in the work and social environments. In addition, those who choose to avail themselves of the opportunities of adult education might be more comfortable in a noncampus setting thus removing a barrier to their educational development. Staff for counseling, guidance, and instruction should be dispersed through community agencies including public libraries, community action agencies, neighborhood schools, area councils, and recreation centers. Also, private agencies including churches with educational/alternate use facilities, non-profit agencies such as Red Cross centers, and industrial services such as teaching facilities, laboratories, and employee recreation facilities will be utilized.

Staffing patterns should allow for maximum flexibility through the use of part-time instructors drawn from the trades or vocations where course demands are most prevalent. Avocational courses in particular should rely heavily on individuals who are dedicated and who see the subject matter as a hobby as much as a profession.

Funding of continuing and adult education courses will pose a problem well into the twenty-first century. Avocational courses will need to become entirely self-sustaining as public tax dollars and legislative support for them dwindles. The following patterns of funding are suggested:

1. Avocational courses - 100% student fees for instruction/direct costs
   90% industry or business/indirect costs

2. Vocational/Occupational - 100% student fees and state funding/direct costs
   40%-60% state funding/remainder local funds

3. Adult Education courses - 100% state funding/direct and indirect costs

Academic Affairs

The Dean of Academic Affairs will be the institution's chief instructional officer and will be responsible for all academic programs and the learning resource center.

Institutional philosophy as reflected in the college's mission statement espouses a belief in the worth of all human beings and a commitment to develop the talents of all the people, regardless of level or individual limitations. In keeping with this philosophy, special attention will be given to the development of the following areas:

Educational Program Committee. This committee, charged with establishing and maintaining the academic integrity of the institution, will provide the vehicle for continuing faculty input on curriculum matters. Cohen and Brawer (1982) cite an authoritarian decision-making structure with little faculty input (an outgrowth of two-year college's roots in public school systems) as a barrier to faculty satisfaction. This committee is designed to alleviate that potential problem.

The committee, convened by the Dean of Academic Affairs, and consisting of faculty representatives from each academic area, will establish a system for periodic review and updating of the curriculum.

Faculty Recruitment. It is apparent from the institutional pholosophy regarding open door admissions that the college will serve a population of wide-ranging abilities and interests. It can be reasoned that faculty recruitment will be critical, as not all potential teachers will support the mission nor be interested in teaching the heavy loads typical of two-year colleges.

Consideration also must be given to the potential impact on instruction which is illustrated by the impact network analysis relative to the increase in "non-traditional" instruction in two year colleges. OCCC will not recruit faculty members who will be able to meet the demands of the institution's commitment to carry out its mission and who possess the skills and interest required to adjust successfully to the impact of technology.

It will be necessary for the institution to implement a compensation plan for faculty which will be attractive and competitive in the Triangle market. OCCC will be competing with four universities, two medical centers, and the research and development opportunities of the Research Triangle Park. Development of a strong faculty development program is imperative.

In order for the institution to develop an outstanding faculty, dynamic leadership will be required. The selection of the Dean of Academic Affairs will be critical. This individual must be an educator, thoroughly grounded in instructional principles and methodologies. However, additional qualities such as a commitment to the institutional philosophy, an understanding of organizational behavior, and human relations/communications skills will be desirable. This individual should be a "risk-taker", enabling the school to stay on the cutting edge of educational change.

Faculty Development. A well-funded, well-defined faculty development plan will assist in the college's efforts to recruit dynamic faculty. The following components will be included:

1. Orientation - extensive orientation to the institution and the community.

2. Enhancement - regular inservice programs concerning management, word-processing, etc. will enhance the faculty's ability to manage time and effort.

3. Development - systematic assessment of needs and in-service training in technological applications in instruction.

4. Leadership - encouragement of a cadre of "master teachers" to facilitate development activities.

Use of Community Resources. Orange County Community College will be located in an area abundant with resources which, if properly cultivated, would greatly enhance the college's programs.

1. Universities - (UNC-Chapel Hill, N.C. Central, Duke, and UNC-Raleigh (more commonly known as NC State)

a. Potential sources of part-time faculty
b. Potential sites for course offerings.

2. Research Triangle Park -

a. Professional and technical expertise for advisory committees.
b. Potential source of part-time faculty.
c. Potential location for training sites with state-of-the-art equipment.

Standards of Student Progress. Establishment of academic policy relative to student progress must consider the institutional philosophy regarding total education as well as the need to establish academic credibility in the Triangle area. Expectations of employers in the Research Triangle Park will be high. The area also enjoys the presence of four universities which have little involvement in vocational/occupational education. In addition, policy development must recognize the potential for changes in eligibility for student financial aid.

Learning Resource Center. If assumption regarding the impact of technology on instruction hold true the Learning Resource Center will evolve as a primary campus resource. In addition to traditional library and media services, the LRC must expand to include:

1. Computerized testing services
2. Production of CAI programs and telecourses
3. Broadcast facilities
4. Technical support for operation, maintenance, and repair of telecommunications network.

The Curriculum

In accordance with mission statements and curricular standards found in the North Carolina Administrative Code, in the Curriculum Standards for Technical and Vocational Curriculums, and in administrative writings previously presented in this document by members of the founding body of Orance County Community College (OCCC), this section of the OCCC Planning Document is submitted by the Division of Academic Affairs as a compilation of guidelines for the curriculum of the college.

The curriculum of OCCC has been carefully developed using the strategic planning processes of "futures research" and "environmental scanning"; this controlled speculation is designed to help educational planners identify events and trends that may have significant impact on an educational organization, in this case, OCCC. The processes are described more fully elsewhere in this document.

Planning Assumptions

Through the OCCC strategic planning processes, the following planning assumptions were derived; the concerns inherent in these assumptions served as the foundation for decisions relating to the OCCC curriculum:

1. Increasing use of non-traditional instruction; data derived from North Carolina Community College System (NCCCS) presidents and deans, and modified using the "impact network";

2. Increasing centralization of program offerings in curricular "hubs" (see "Technical and Vocational Programs"); based on interviews with NCCCS administrators;

3. Increasing need for more instruction in the humanities, particularly in technical-vocational curricula; data derived from governmental reports;

4. Demographic changes in the Triangle area (see Environmental Analysis);

5. Increasing employment opportunities in the following areas; data derived from Triangle "J" Council of Government and N.C. Employment Security Commission:

   a. Computer Science, especially micro-technology and robotics;
   b. Allied health sciences;
   c. Construction;
   d. Communications, especially fiber optics, lasers, and telephony;
   e. Public services;
   f. Business technologies.

Program Areas

In keeping with educational criteria established by the Department of Community Colleges (DCC), the following program areas will be offered at Orange County Community College:

1. college transfer;
2. general education;
3. technical/vocational;
4. developmental/remedial.

The "Core"

A general education "core" of required courses has been established by OCCC. These courses must be taken by all students at OCCC who are seeking an associate degree; a modified version of the core will be taken by vocational students seeking either the one-year diploma or the certificate. The core was initiated at OCCC as a result of trend data indicating the increasing need for instruction in the liberal arts. Moreover, OCCC is dedicated to the concept which insists that a functioning and healthy democracy requires an educated citizenry. To this end, the core curriculum at OCCC will emphasize the humanities via required "omnibus" courses designed to place the humanities in the context of the American citizen and working person. These omnibus, or overview, courses will be entitled "The Pursuit of Happiness" (Parts I and II), and will be designed as survey courses incorporating many of the humanities disciplines, for example, art, music, literature, philosophy, history, ethics, and civics. The objective of this humanities requirement will be to introduce technical and vocational students to the world of the humanities, particularly, as this world interfaces with the world of work. The ultimate goal will be to whet the students' appetites for further leisure reading and study in the humanities. The OCCC core curriculum will be based on agreements of

articulation between OCCC and area senior institutions, and will include the following:

1. English, including composition and speech - 9 quarter hours;
2. Behavioral Sciences - 6 quarter hours;
3. Humanities, via "The Pursuit of Happiness" - 6 quarter hours;
4. Electives - 6 quarter hours;

*Total: 27 quarter hours.

Advisory Boards

Area specialists in technical-vocational and academic fields will be appointed to field-specific advisory boards. These boards will advise the faculty and administration on matters of curricular programming in order that course offerings at OCCC might stay on the "cutting edge." Each curriculum will be advised by a separate advisory board made up of specialists in the particular curriculum area.

Degrees Offered

Orange County Community College will offer the following degrees upon completion of the appropriate courses of study:

1. Associate of Arts (A.A.), designed for college transfer;
2. Associate of Sciences (A.S.), designed for college transfer;
3. Associate of General Education (A.G.E.), designed for general interest and not specifically for college transfer;
4. Associate of Applied Sciences (A.A.S.), for technical areas.
5. Diploma, for vocational students who complete their vocational programs (including general education);
6. Certificate, for vocational students who complete only the technical courses of their vocational program.

Faculty

The faculty of OCCC will be hired on the basis of D.C.C. standards, and adaptability and sensitivity to the OCCC curricula. OCCC will hire full-time faculty members form the applicant pool; moreover, OCCC will hire part-time faculty members from industrial centers and senior collegiate institutions in the area to teach speciality courses (see "Personnel Policies").

Programs

College Transfer. OCCC has established a program of college transfer which, in accordance with the N.C. Administrative Code, "consists of planned academic curriculum programs leading to the Associate of Arts and the Associate of Science." OCCC is in agreement with the works of former chairman of the N.C. State Board of Education, Dr. Dallas Herring, who noted that "no man is educated who does not have some mastery of . . . what the ancient Romans called artes liberales, or learning in the arts that befit free men." Therefore, the OCCC college transfer program is carefully organized to thoroughly prepare students to transfer to area senior institutions in the junior year of study.

1. Requirements for Associate of Arts:

   a. English - 15 quarter hours of which 9 hours must be in composition and speech
   b. Mathematics - 6 quarter hours;
   c. History - 12 quarter hours;

   d. Science - 12 quarter hours, which must be taken in a 3-quarter laboratory science course sequence in biology, chemistry, or physics;
   e. Physical Education - 3 quarter hours;
   f. Behavioral Sciences - 6 quarter hours;
   g. Humanities - 15 quarter hours, six of which must be in the omnibus courses "The Pursuit Of Happiness" (Parts I and II);
   h. Electives - 27 quarter hours;

   *TOTAL: 96 quarter hours.

2. Requirements for Associate of Sciences:

   a. English - 9 quarter hours in composition and speech;
   b. Mathematics - 18 quarter hours;
   c. Science - 24 quarter hours, in sequential laboratory science;
   d. Behavioral Sciences - 9 quarter hours;
   e. Humanities - 6 quarter hours, in "The Pursuit of Happiness";
   f. Physical Education - 3 quarter hours;
   g. Electives - 27 quarter hours;

   *TOTAL: 96 quarter hours.

General Education. A description of the OCCC general education core has been previously given; this core will be required of all students seeking the associate degree. OCCC will offer the Associate of General Education (A.G.E.) for "students who desire two years of general education beyond the high school level." This program will be primarily a general interest program, and will not be principally designed for college transfer.

1. Requirements for Associate of General Education
   a. English - 9 quarter hours, in composition and speech;
   b. Behavioral Sciences - 3 quarter hours;
   c. Science or Mathematics - 3 quarter hours;
   e. Humanities - 6 quarter hours, in "The Pursuit of Happiness";
   f. Electives - 75 quarter hours;

   TOTAL: 96 quarter hours

Technical and Vocational Programs. OCCC is firmly committed both to its own mission statements concerning technical and vocational education, and to the guidelines established by the DCC which state, in part, that such programs "should be designed to prepare individuals for employment in fields recognized as semi-professional or para-professional in status." In order to accomplish this mission, OCCC has employed strategic planning processes developed to help identify the educational needs of the Orange County community. The forecasted trends resulting from OCCC strategic planning have been previously discussed, but two of them (points B and E of "Planning Assumptions") warrant further attention.

OCCC strategic planning has identified a trend relating to the increasing centralization of program offerings in curricular "hubs". These hubs consist of technical/vocational programs that are specifically needed by individual communities; for example, community colleges in the coastal areas of North Carolina might be considered hubs for nautical technologies essential to their communities alone. Because of its location near the Research Triangle, three senior collegiate institutions, and two major medical centers, OCCC has organized its technical/vocational offerings around six curricular hubs specifically needed by the Orange County community--Computer Science Technology; Allied Health Technology; Construction Technology; Communications Technology; Public Services Technology; and Business Technology. Although the hub approach is a departure from more traditional programming classifications, we feel that this approach is an appropriate way to meet the needs of Orange County and the surrounding areas.

1. Computer Science Technology (Program Hub)

   a. Micro-Technology
   b. Robotics
   c. Computer and Information Sciences
      i. Data Processing
      ii. Computer Maintenance
      iii. Work Processing
      iv. Computer/Electronic Technology

2. Allied Health Technology (Program Hub)

   a. Radiologic Technology
   b. Pharmacy Technology
   c. Physical Therapist Assistant
   d. Dental Laboratory Technology
   e. Opticianry Technology
   f. Medical Laboratory Technology
   g. Emergency Medical Science
   h. Occupational Therapy Assistant
   i. Medical Records Assistant

3. Construction Technology (Program Hub)

   a. Drafting
   b. Carpentry
   c. Plumbing/Piping
   d. Masonry
   e. Welding
   f. Heating and Air Conditioning
   g. Surveying

4. Communications Technology (Program Hub)

   a. Fiber Optics
   b. Lasers
   c. Telephony

5. Public Services Technology (Program Hub)

   a. Criminal Justice
   b. Para-Legal Assistant
   c. Teacher's Aids
   d. Day Care Assistant

6. Business Technology (Program Hub)

   a. Secretarial Science
   b. Accounting
   c. General Office Technology

Technical Programs

Technical programs are designed to lead to the Associate of Applied Science degree (A.A.S.), and generally require two years of full-time study for completion. Requirements for Associate of Applied Science are as follows:

   a. The general education core - 27 quarter hours;
   b. Technical specialty courses - the number of quarter hours is relative to the particular program, and should require between 69 and 101 quarter hours; the total hours needed for completion of the A.A.S. fall between a minimum of 96 hours and a maximum of 128.

Vocational Programs

OCCC will offer one-year vocational programs which are "primarily oriented to the development of manipulative skill competencies for use in specialized occupations." These vocational programs can be centered in any of the curricular hubs. OCCC will award both a diploma and a certificate for completion of vocational programs:

1. Requirements for Diploma:

   a. Completion of modified general education core - 12 hours, which includes 6 hours in English composition and speech, and 6 hours in Humanities ("The Pursuit of Happiness);

   b. Technical specialty courses - the number of hours is dependent on the particular program of study, but a minimum of 52 hours is required; total hours for diploma: 64.

2. Requirements for Certificate:

   Generally, a certificate will be awarded to a student who completes the technical specialty courses specific to a particular program. However, OCCC requires that all students seeking the certificate take "The Pursuit of Happiness" which OCCC considers a further modification of the general education core.

   a. Completion of "The Pursuit of Happiness" - 6 hours;

   b. Technical specialty courses - the number of hours will be dependent on the particular program of study; a certificate may be awarded for

technical coursework amounting to less than 52 quarter hours; the total hours for the certificate may be fewer than 64 quarter hours.

Developmental Programs. As stated in the institutional objectives, OCCC seeks to "provide the opportunity for basic skills improvement." OCCC is dedicated to "total education," and a basic policy of the institution insists that all students should achieve basic competencies; therefore, developmental/remedial course offerings will be made available to OCCC through the Learning Resource Center (Library). These courses will be designed to be a part of the general education component of the OCCC curriculum; developmental/remedial course work may count as elective credit. Students will be placed in developmental courses based on college placement examinations.

Visiting Artist Program. OCCC will co-operate with the DCC and the N.C. Arts Council in serving as a host institution for the artist-in-residence (see. 0304, page 113 of the N.C. Administrative Code).

Scanning Taxonomy

Orange County Community College

S-0.00 SOCIAL

- S-1.00 Demographics
  - S-1.10 Population
  - S-1.20 Migration Patterns
  - S-1.30 Birth Rate
  - S-1.40 Retirement
  - S-1.50 Households
  - S-1.60 Prison Populations
- S-2.00 Education
  - S-2.10 Enrollment Trends
  - S-2.20 Aspirations and Goals
  - S-2.30 Public Opinion
    - S-2.31 Support
    - S-2.32 Values
    - S-2.33 Confidence
- S-3.00 Crime
- S-4.00 Drug Issues
- S-5.00 Opinions and Attitudes
  - S-5.10 Religious Issues
  - S-5.20 Political Issues
  - S-5.30 Community Issues
  - S-5.40 Other Issues
- S-6.00 Family Life
  - S-6.10 Employment Patterns
    - S-6.11 Role of the Female
    - S-6.12 Role of the Male
  - S-6.20 Day Care

E-0.00 ECONOMIC

- E-1.00 Governmental Expenditures
  - E-1.10 Education
    - E-1.11 Elementary and Secondary
    - E-1.12 Community and Junior College
    - E-1.13 Four Year Colleges
    - E-1.14 Other Educational Expenditures
  - E-1.20 Other Areas
- E-2.00 Job Opportunities
  - E-2.10 Employment Trends
    - E-2.11 Growth of Jobs

E-2.12 Decline of Jobs
E-2.13 Retraining
E-2.20 Teachers
E-2.21 Employment Prospects
E-2.22 Training and Certification
E-2.30 Full- vs. Part-Time Employment
E-2.40 Future Occupations

E-3.00 Taxation
E-3.10 Federal
E-3.20 State
E-3.30 Local

E-4.00 Business Trends

E-5.00 Income
E-5.10 Income Growth
E-5.20 Poverty

L-0.00 LEGISLATIVE/REGULATORY

L-1.00 State
L-1.10 Laws Affecting Education
L-1.11 Elementary and Secondary
L-1.12 Community and Junior Colleges
L-1.13 Four Year Institutions
L-1.14 Other Educational Areas
L-1.20 Educational Expenditures
L-1.21 Elementary and Secondary
L-1.22 Community and Junior Colleges
L-1.23 Four Year Institutions
L-1.24 Other Educational Areas

L-2.00 North Carolina Colleges and Universities
L-2.10 Community College System
L-2.11 Regulations
L-2.12 Relationship with Individual Community Colleges and Technical Institutes
L-2.13 Relationship with the U.N.C. System
L-2.14 Relationship with Other Institutions
L-2.20 University of North Carolina System
L-2.21 Regulations
L-2.22 Relationship with the Community College System
L-2.23 Relationship with Other Institutions

L-3.00 Federal
L-3.10 Education
L-3.11 Student Aid
L-3.12 Educational Support
L-3.13 Department of Education
L-3.14 Curricula Areas
L-3.15 Athletics
L-3.20 Commerce/Trade
L-3.30 Other Areas

L-4.00 Accrediting Agencies
- L-4.10 SACS
- L-4.20 Professional Agencies

L-5.00 Local
- L-5.10 County Government
- L-5.20 City Government
- L-5.30 Regional Agencies

T-0.00 TECHNOLOGY

T-1.00 Instructional/Educational
- T-1.10 Computers
- T-1.20 Audio/Visual
- T-1.30 Tele-links
- T-1.40 New Curricula Areas

T-2.00 Business
- T-2.10 Robotics
- T-2.20 Computers
- T-2.30 Biotechnical
- T-2.40 Other New Trends

APPENDIX C

HOW TO BE AN ENVIRONMENTAL SCANNING MONITOR

The primary task of an environmental scanning monitor is to identify (l) good and objective descriptions of the current environment and (2) signals of potential change. Therefore, you need to abstract such items as analyses of perceived changes in societal values, an increase in worker dissatisfaction, or even changes in life expectancy. You should be particularly alert for forecasts about the future by known authorities, such as:

- By 1990 health care costs will equal 15% of the United States' gross national product.

- Between 1980 and the year 2000 life expectacy will increase by 5 years.

- In the year 2000, 40% of the world electrical power will be generated by nuclear power plants.

Articles which include time series information are often appropriate for abstraction. For example: In 1970, 35% of married women were in the labor force; by 1980 this percentage had risen to 49%.

TERMS

- A **trend** is a series of social, technological, economic or political characteristics which can usually be estimated and/or measured over time, such as the number of adults enrolling in continuing education programs since World War II. Trend information may be used to describe the future, identify emerging issues, and project future events.

- An **emerging issue** is a potential contoversy that arises out of a trend or event which may require some form of response. For example, during World War II, many married women entered the labor force for the first time. An emerging issue at that time would have been controversy over women's roles in the home and family.

- An **issue** is a controversy with defined stakeholder interests that requires some form of action. An issue for TIAA/CREF, for example, is the controversy over use of unisex actuarial tables for life insurance and pensions.

- An **event** is a discreet, unambiguous, confirmable occurrence which makes the

future different than the past. An event would be passage of the "flat tax."

A major purpose of analyzing trends is to identify emerging issues which may affect the programs and administration of Orange County Commnity College. Identifying issues early on enables us to take advantage of upcoming opportunities or to plan for possible brush fires.

CRITERIA FOR ABSTRACTING

- Does the item represent events, trends, developments, or ideas that you have never before encountered?

- Does the item contradict previous assumptions or your own beliefs about what seems to be happening?

- Is the article from a surprising source, such as a liberal or conservative journal?

- Can you link the item to other abstracts which you have previously written or seen?

- Do the implications of the item have explicit or implicit bearing on the long-range program or management of OCCC?

WRITING AN ABSTRACT

An abstract is an easy-to-read digest of original material. The goal is to write a concise, accurate presentation of the material that is fully understandable without reference to the original source.

To begin the summary section, ask yourself, "If I had only a few minutes to describe this article to a colleague, what would I say?" What is the most important idea or event that indicates change? Your response to these questions should be the lead sentence of the abstract. Follow this sentence with development and explanation. Use quotation marks to make it clear when you are making direct citations from the text. Whenever possible, include statistical data. Limit the summary to no more than one-half page of single-spaced, typewritten copy.

The implications section of the abstract is where you respond to the question, "How will the information in this article affect OCCC's programs or management?" You might also include a list of those emerging issues suggested by the article, a description of future events you see occurring as a result of the trend identified by the

article, and/or an identification of issue stakeholders if they are not listed by the article.

Speculation about implications is a part of the scanning and abstracting process. Here you try to determine an item's potential for affecting other facets of the social environment and/or OCCC. There are no "right" answers in this section. Note, however, that some articles may offer no implications that are immediately apparant. The analysis and evaluation committee, with the benefit of related abstracts from your colleagues, may be able to detect implications that a single monitor cannot.

Limit your abstract to one page, somewhat equally divided between the summary and implications sections. Pay special attention to correctly citing the periodical (title, date, and page numbers).

Each abstract should contain the following information in the indicated order:
Taxonomy number:
Title of article:
Author:
Publication:
Date: Pages: Vol.: No.:
Summary:
Implications:
Monitor's Name:

NEWSPAPERS AND JOURNALS TO BE MONITORED

The following newpapers and journals will be scanned in the OCCC environmental scanning system. Each member of the ED QUEST team will be assigned one or more information resources, one newspaper, and one or more journals in several sectors:

Major Newspapers

The New York Times
The Wall Street Journal
The Los Angeles Times
USA Today
The Times Higher Education Supplement
The Miami Herald
The Chicago Tribune
The Christian Science Monitor
The Chronicle of Higher Education
Education Week

Major Journals

Social/demographic

American Demographics
Public Opinion Quarterly
Public Opinion

Economic

Business Week
The Economist
Fortune
Forbes
Money
Inc.
Monthly Labor Review

All Sectors

Vital Speeches of the Day
Across the Board
Naisbitt Trend Letter
U. S. News and World Report
The Futurist

Technological

High Technology
Datamation
Byte
Computer World
Discover
Technological Forecasting and Social Change
Information World

Political

New Republic
The National Review
The National Journal
Mother Jones

Kiplinger Washington Letter
Time
Newsweek
Future Survey

APPENDIX D

IMPLEMENTING ED QUEST AT ORANGE COUNTY COMMUNITY COLLEGE

EDCI 260
UNC-CH School of Education
FALL, 1986

James L. Morrison, Professor

One of the critical issues college administrators must address is the way in which they analyze their institutional environments and formulate the strategic policies necessary for their institutions to adapt to all of their environments, internal and external. Without knowledge of these environments, it is difficult for administrators to develop appropriate strategies to achieve organizational goals. The formulation and selection of strategic policies require an accurate assessment of the opportunities and threats the environment poses for the institution. It is important, therefore to be able to identify and forecast critical trends, events and their interrelationship which enable us to develop images of possible future environments within which the institution may function. That is, well developed scenarios of alternative futures illustrate unique configurations of trends and possible future events with which the institution may have to contend, thereby providing the basis for selecting strategic options.

Most educational planning models, however, are weak in identifying future events and assessing their impact on education. At best, they assume a surprise-free future in which present trends continue unabated. Such models implicitly assume that the interrelationships between and among social, economic, political, and technological forces will remain essentially the same. We know, however, that this is not true, and the further we go out into the future, the less it will be true. What is needed is a model which enables us to detect signals of change (i.e., emerging issues or events which may make the future different from the past) and link this information to the organization's strategic planning process.

ED QUEST is such a model. It specifies the tasks a team must accomplish in evaluating, analyzing, and using information from the external environment to plan more effectively in this changing world. The general tasks are as follows:

1. identify critical trends, events, and emerging issues;

2. develop experience in evaluating, ranking, and forecasting the most important trends and events;

3. define the nature of the institution, i.e., the elements of the mission, the indicators of institutional performance, and organizational strengths and weaknesses;

4. assess critical trends and events on the mission, indicators of institutional performance, and organizational strengths and weaknesses;

5. develop alternative visions (scenarios) of the future;

6. identify strategic options in response to these scenarios;

7. evaluate these options for robustness across scenarios; and

8. incorporate robust options in the operational and strategic plans of the institution.

These tasks are described below.

Task I: Identifying Critical Trends, Events, and Emerging Issues

The first task is to identify those trends, events, and emerging issues which signal changes in the external environment and which may be of importance to the future of Orange County Community College. For purposes of this proposal, trends, events, issues and emerging issues are defined as follows:

• A **trend** is a series of social, technological, economic or political characteristics which can usually be estimated and/or measured over time. It is a statement of the general direction of change, usually gradual long term change, reflecting the forces shaping the region, nation, or society in general. Trend information may be used to describe the future, identify emerging issues, or project future events. For example, at most institutions student profiles are changing. Indicators of this trend are the number of minority students or the number of full-time adult students enrolling.

• An **event** is a discrete, confirmable occurrence which makes the future different from the past. An event would be, "Federal funding for student financial aid is reduced by 50%."

• An **emerging issue** is a potential controversy that arises out of a trend or event which may require some form of response. For example, "Litigation as measured by the number of law suits per year in American society is increasing." An immediate consequence of this trend is substantially higher liability insurance for colleges and universities. An emerging consequence arises from a tendency of state legislatures to protect the public by requiring licensure of an increasing number of occupations, including periodic "updating" of credentials. This consequence implies an enhanced opportunity for the expansion of continuing adult and technical/occupational education programs.

Identifying critical trends, events, and emerging issues requires accomplishing the following subtasks:

a. Develop the OCCC Future Prospects Notebook which serves as an initial draft of those trends, events, and emerging issues which may be of critical importance to the college. Each member of the OCCC ED QUEST team will be assigned a number of scanning resources. Abstracts from those resources will be submitted weekly during class, with the objective that the last year of publication of each of the resources will be reviewed no later than September 30. These abstracts will go into the scanning file maintained outside of room 121 Peabody Hall. Although all members of the team are encouraged to read through the complete file, each member will be responsible for preparing one section of the notebook from the files, e.g., demographic, economic, etc. Each section of the notebook, then, will consist of a written summary (supplemented by tables and charts) of those trends, possible events, and emerging issues which the author deems most important for OCCC.

b. With the notebook as background, ED QUEST team members will develop a schedule to interview key administrators and faculty members in selected North Carolina community colleges and technical institutes as well as members of the North Carolina Deparment of Community colleges. The notebook and the results of the interviews will constitute the basis for the construction of a Delphi questionnaire described below.

Task 2: Identifying and Assessing the Impact of Critical Trends and Events

The task requires forecasting the "most likely" future of those trends and potential events deemed critical to defining the context within which Orange County Community College will function in the next decade. The "most likely" future has two important properties: first, it, plus its attendant uncertainties, is the future one would bet on given only one choice (which, it might be added, is never the case), and, second, it is the future out of which--and only out of which--it is possible to construct meaningful and important alternative futures. That is, all alternative futures are alternatives to the "most likely" future. This requires accomplishing the following subtasks:

a. Analyze the results of task I above and develop a Delphi questionnaire in which respondents interviewed earlier are requested to forecast the "most likely" future of those trends and events and assess their impact on Orange County Community College. Each ED QUEST member will develop that portion of the Delphi questionnaire relating to their area of the notebook. The printing and distribution of the questionnaire is the responsiblity of the instructor.

b. Analyze the results of the Round I (R1) Delphi and write the "most likely future." Each ED QUEST member will draft the "most likely future" for their sector of responsibility (social, demographic, economic, etc.).

Task 3: Defining the Nature of Orange County Community College

It is important to specify the nature of the institution in order to focus on those aspects of OCCC's mission, performance indicators, and perceived strengths and weaknesses which could be affected by forecasted trends and events. Specifying the nature of Orange County Community College requires accomplishing the following subtasks:

a. Define the specific elements which comprise the mission, i.e., the groups of students and/or clients served, the social needs fulfilled, and the programs and/or services provided.

b. Identify indicators of institutional performance, e.g., placement rate of graduates, retention rate, and awards received by students.

c. Identify strengths and weaknesses.

These subtasks will be accomplished in a class exercise.

Task 4: Assessing Effects of Critical Trends and Events on OCCC

Assessing the effects of critical trends and events on the institution allows decision makers to identify the specific changes that these trends and events may have on the elements of the mission and organizational performance indicators. Subtasks which must be accomplished are:

a. Assess effects on mission

1. client group
2. needs serves
3. services provided

b. Assess effects on performance indicators

c. Verify strengths and weaknesses

These subtasks will be accomplished in class exercises.

Task 5: Developing Alternative Futures (Scenarios) Facing Orange County Community College

Alternative future environments are worth careful delineation and evaluation for at least two reasons. First, no one can predict the future environment that will actually materialize; it is therefore important to have a realistic sense of the range of possibilities. Second, an understanding of this range enables planners to identify more authoritatively the features that may be common to all or many of the alternatives and thus likely to have an impact on the college no matter which alternative does occur.

An alternative future is a policy-relevant, plausible, and internally consistent narrative description, usually of a specific pattern of developments judged by some algorithm to have happened over time. It is based on and disciplined by the quantitative estimates derived through a process like the Delphi. Such a narrative is called a scenario.

Scenarios are like histories of the future. They are integrating mechanisms--devices for organizing or synthesizing many separate developments, such as the individual trend projections and event forecasts from the round two Delphi. They provide a rich context, or framework, within which it is possible to ask vital questions about one's own planning assumptions. But scenarios go beyond histories. Because they provide a way of making forecasted events not only "happen," but happen in full view of their causes and consequences, they are also devices that can be used to ask specific "what if" questions and to examine strategic policy options. In these and other ways, scenarios serve as tools that force the user to think in the future tense, to be explicit about expectations and their rationale, and to probe models of how the world works. Unlike a history, which is good to the extent that it is both accurate and readable, a scenario is good to the extent that it is useful in achieving these purposes.

In this task we will develop approximately three alternatives to the "most likely" (i.e., nominal or baseline) scenario, each using the same methodology, the essence of which is that certain combinations of events (from the Delphi) will be permitted to "happen" (or fail to happen) in accordance with their estimated probability levels in the future. This requires building a complete cross-impact model which specifies the causal relationships, if any, among the events and the trends forecasted in the Delphi. That is, we will estimate how the occurrence of each event in the selected set might affect the probability of every other event in the set, as well as the nominal forecast of each of the selected trends. Thus, when these relationships have been specified, it is possible to make various events "happen" and then trace out a distinct, plausible, and internally consistent future. Through this means we will develop three alternative futures as represented by an "unsettled" future (in which those events with a 60 percent probability level occur); a "turbulent" future (in which all of the preceding events, plus those events with a 30 percent probability level occur); and a "chaotic' world (in which all of the events from the "turbulent" world, plus all of the remaining events which have a 10 percent probability level, occur).

Together with the "most likely" scenario these futures should provide a good sense of the range of possible futures likely to confront Orange County Community College. As will become clear during the project, none of these alternatives will represent a forecast, still less a prediction. They are strictly hypothetical constructions, and the odds are overwhelming that the actual future which materializes over the next ten years will be different in important respects from all of them--as well as from the

so-called "most likely' future. Nevertheless, these scenarios will provide the Orange County Community College planning committee with a greater understanding of the range of future possibilities, the sometimes subtle mechanics of the process whereby a future comes into being, and the need for imagination and flexibility in policy formulation to anticipate and meet the actual future as it rushes in.

Developing alternative futures requires completion of the following subtasks:

a. Construct a cross-impact model of the most important trends, events, and performance indicators This will be accomplished in a class exercise.

b. Write three alternative scenarios. Each alternative will be written by a two person team.

Task 6: Developing Robust Policy Options

Developing policy options requires accomplishing the following subtasks:

a. Examine the plausibility of each scenario. If omissions are discovered, they must be filled. If trends or event forecasts are dubious or incredible, they must be revised.

b. Identify the implications of each scenario for the college.

c. Brainstorm a preliminary list of strategies appropriate for nomination as strategic options for each scenario, i.e., strategies that are appropriate and feasible responses to one or more of the implications previously identified for each scenario in 5 (b) above.

d. Review the options to ensure that each option significantly places the college in an advantageous position in relationship to the future environment described in a particular scenario. Statements of proposed options which focus more on operational aspects of the institution may be either rewritten to reflect a more strategic emphasis or combined with other options into a new strategic option statement.

e. Assess the potential of each option on enhancing institutional strengths or inhibiting institutional weaknesses.

f. Assess which options are the most robust and could, if implemented, address the implications of more than one of the alternative futures presented in the scenarios.

Each scenario team will design options for their scenario. "Scrubbing" will be accomplished as an ED QUEST team exercise.

Task 7: Final Report

This task needs no elaboration. In it, the results from all earlier tasks will be documented, including such background information as may be necessary in order to provide readers with an awareness of how the substantive findings were established and processed.

ERIC Clearinghouse for
Junior Colleges